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## **2010 Defense Industrial Base Critical Infrastructure Protection Conference (DIBCIP)**

*"Risk Reduction & Mitigation in the Defense Industrial Base"*

April 26-28, 2010  
Philadelphia, PA

### Agenda

#### **Tuesday, April 27, 2010**

##### **Keynote Address: The Economic Crisis and Its Impact on the DIB: Defense Industrial Base Forecasts 2010-2020**

- Mr. James Averell, Economist, DCMA-Industrial Analysis Center

##### **Panel: Cyber Security Critical Infrastructure Protection and Public-Private Partnerships**

- Mr. Steve Lines, Director, Business Continuity and Information Assurance, Science Applications International Corporation (SAIC); DSIE Chairman
- Mr. Guy Copeland, Vice President of Information Infrastructure Advisory Programs within Computer Science Corporation's North American Public Sector; CSCSWG Co-Chairman

##### **Panel: Critical Infrastructure Protection Mission Assurance Assessments (MAA)**

- Mr. Steve Turdo, Industrial Specialist, DCMA Lead CIP-MAA Analyst, DCMA-Industrial Analysis Center
- BG James Hoyer, USA, Director, Joint Staff, WV Army National Guard

#### **Wednesday, April 28, 2010**

##### **Industry Keynote Address**

- Mr. Ed Halibozek, Director of Corporate Security, Northrop Grumman Corporation

##### **Threats to the DIB**

- Ms. Melissa Smislova, Associate Deputy Under Secretary for Analysis (DU/S-A), U.S. Department of Homeland Security

##### **Panel: Interdependencies Risk Management**

- Capt. Walt Smith, Philadelphia Police Department, Homeland Security Division
- Mr. Lawrence V. Wasnock, Vice President, Human Resources & Ethics Officer, L-3 Communications - Marine & Power Systems
- Mr. Jake Carson, Program Manager, U.S. Transportation Command
- Mr. Christopher Reichart, Head, Infrastructure & Networks Analysis & Assessment Branch, Naval Surface Warfare Center-Dahlgren Division, Z32

##### **Panel: DIB Sector Involvement in Recent and Planned Exercises**

- COL Paul Ahern, USA, Director, Response Team, DCMA- Industrial Analysis Center
- Mr. John Schauffert, Assessments Branch Chief, Force Protection and Mission Assurance Division, U.S. Northern Command,
- Ms. Nancy Pomerleau, Exercise Director, Partnership Outreach Division, DHS-IP DIB

# 2010 DIB★CIP

DEFENSE INDUSTRIAL BASE  
CRITICAL INFRASTRUCTURE PROTECTION CONFERENCE

*“RISK REDUCTION & MITIGATION IN THE  
DEFENSE INDUSTRIAL BASE”*



APRIL 26-28, 2010

EVENT #0030 ► PHILADELPHIA, PA ► SHERATON SOCIETY HILL

[WWW.NDIA.ORG/MEETINGS/0030](http://WWW.NDIA.ORG/MEETINGS/0030)

## MONDAY, APRIL 26, 2010

12:00-7:30pm	Registration
6:00-7:30pm	Networking Reception

## TUESDAY, APRIL 27, 2010

7:00-5:00pm	Registration
7:00-8:00am	Continental Breakfast
8:00-8:15am	<b>Welcome &amp; Introduction</b> <ul style="list-style-type: none"><li>• <i>MG Barry D. Bates, USA (Ret), Vice President, Operations, NDIA; DIB SCC Chairman</i></li><li>• <i>Mr. Jamie Clark, Director, Defense Critical Infrastructure Program, Office of the Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs; DIB GCC Chairman</i></li></ul>
8:15-9:15am	<b>Keynote Address</b> <ul style="list-style-type: none"><li>• <i>Honorable Dr. Paul Stockton, Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs</i></li></ul>
9:15-10:15am	<b>Senior Level Discussion on Infrastructure Protection</b> <ul style="list-style-type: none"><li>• <i>Mr. Todd Keil, Assistant Secretary, Office of Infrastructure Protection, U.S. Department of Homeland Security</i></li></ul> <p><b>Discussion Topics:</b> Challenges and efforts relating the protection of assets essential to the nation's security, public health and safety, economic vitality and way of life.</p>
10:15-10:45am	Networking Break
10:45-12:00pm	<b>Panel: Resilience Leadership</b> <ul style="list-style-type: none"><li>• <i>Mr. Michael C. H. McDaniel, Deputy Assistant Secretary of Defense for Homeland Defense Strategy, Prevention &amp; Mission Assurance, DoD</i></li><li>• <i>Mr. Raymond Musser, Staff Vice President - Security, General Dynamics; DIB SCC Vice Chairman</i></li><li>• <i>Ms. Carolyn Parisot, FBI</i></li><li>• <i>Mr. Darrell Darnell, Director, Critical Infrastructure Protection and Resilience Policy, National Security Staff, The White House</i></li></ul> <p><b>Discussion Topics:</b> Critical Infrastructure Protection activities affecting DIB sector resiliency; Visions for the future.</p>

12:00-1:00pm

Networking Buffet Lunch

1:00-2:00pm

**Keynote Address: The Economic Crisis and Its Impact on the DIB: Defense Industrial Base Forecasts 2010-2020**

• *Mr. James Averell, Economist, DCMA-Industrial Analysis Center*

2:00-3:15pm

**Panel: Cyber Security Critical Infrastructure Protection and Public-Private Partnerships**

• *Mr. Thomas Bozek, Principal, Bozek Consulting, LLC*

• *Mr. Steve Lines, Director, Business Continuity and Information Assurance, Science Applications International Corporation (SAIC); DSIE Chairman*

• *Mr. Guy Copeland, Vice President of Information Infrastructure Advisory Programs within Computer Science Corporation's North American Public Sector; CSCSWG Co-Chairman*

• *Mr. Brian Fredericks, Deputy, DIB CS/IA Task Force, OASD (NII)*

• *Mr. Eric Noonan, Director of Security, BAE Systems*

**Discussion Topics: Defense industry efforts to combat the attacks of cyber warfare; The mission and activities of the Defense Security Information Exchange; Public-private partnerships; National level issues, initiatives and activities of the working bodies of the President's National Security Telecommunications Advisory Committee (NSTAC).**

3:15-3:45pm

Networking Break

3:45-5:00pm

**Panel: Critical Infrastructure Protection Mission Assurance Assessments (MAA)**

• *Mr. Steve Turdo, Industrial Specialist, DCMA Lead CIP-MAA Analyst, DCMA-Industrial Analysis Center*

• *Col Thomas McGinley, USAF, Provost Marshal J34, National Guard Bureau*

• *Mr. Justin Rubin, Business Continuity Coordinator, BAE Systems Electronic Solutions*

• *BG James Hoyer, USA, Director, Joint Staff, WV Army National Guard*

• *MAJ Scott White, USA, CIP-MAA Team Leader, NY Army National Guard*

• *1LT Jeremy Samples, USA, CIP-MAA Team Leader, WV Army National Guard, JITEC*

• *1SG Jon Huddleston, USA, CIP-MAA Team Sergeant/Mission Analyst, CO Army National Guard*

**Discussion Topics: Overview and demonstration of DoD CIP-MAA purpose and process; Trend analysis and mitigation strategies for common vulnerabilities within the sector.**

5:00pm

Adjourn for the Day



## WEDNESDAY, APRIL 28, 2010

- 7:00-5:00pm**                      **Registration**
- 7:00-8:00am**                      **Continental Breakfast**
- 8:00-9:00am**                      **Industry Keynote Address**  
• *Mr. Ed Halibozek, Vice President of Security, Flight Operations and Administration, Northrop Grumman Corporation*
- Discussion Topics: Preparedness, Security, Business Continuity and Resiliency within the Defense Industrial Base.**
- 9:00-10:00am**                      **Threats to the DIB**  
• *Ms. Melissa Smislova, Associate Deputy Under Secretary for Analysis (DUIS-A), U.S. Department of Homeland Security*
- Discussion Topics: A general threat overview for current activities within the last 6-9 months with a focus on matters important to the Defense Industry; Perspectives on the effectiveness of public/private sector information sharing practices and a vision for improving information sharing capabilities in the future.**
- 10:00-10:30am**                      **Networking Break**
- 10:30-12:00pm**                      **Panel: Homeland Defense/Security/Local Program Implementation - Effective Partnerships**  
• *Mr. Raymond Musser, Staff Vice President - Security, General Dynamics; DIB SCC Vice Chairman*  
• *Chief William McSweeney, Los Angeles Sheriff, Homeland Security Division*  
• *Sgt. Peter Jackson, Los Angeles Sheriff's Department, Joint Regional Intelligence Center*  
• *Ms. Kathy McKeever, Assistant Deputy Director, Critical Infrastructure Protection, California Emergency Management Agency*
- Discussion Topics: Ongoing and planned activities, success stories and challenges with implementing comprehensive preparedness, response and recovery tactical programs operations in major metropolitan areas by building effective partnerships with the federal government, regions, state governments and the defense industry.**

12:00-1:00pm

**Networking Buffet Lunch**

1:00-2:30pm

**Panel: Interdependencies Risk Management**

- *Ms. Mary Ann Tierney, Deputy Managing Director for Emergency Management, Philadelphia*
- *Capt. Walt Smith, Philadelphia Police Department, Homeland Security Division*
- *Mr. Lawrence V. Wasnock, Vice President, Human Resources & Ethics Officer, L-3 Communications - Marine & Power Systems*
- *Mr. Jake Carson, Program Manager, U.S. Transportation Command*
- *Mr. Christopher Reichart, Head, Infrastructure & Networks Analysis & Assessment Branch, Naval Surface Warfare Center-Dahlgren Division, Z32*

**Discussion Topics:** Improving government communication, analysis and coordination for DIB CIKR dependent systems to enhance the overall resiliency of the sector; A discussion of typical dependencies and what government and industry are doing to mitigate risks.

2:30-3:00pm

**Networking Break**

3:00-4:30pm

**Panel: DIB Sector Involvement in Recent and Planned Exercises**

- *COL Paul Ahern, USA, Director, Response Team, DCMA-Industrial Analysis Center*
- *Mr. John Schaufert, Assessments Branch Chief, Force Protection and Mission Assurance Division, U.S. Northern Command, J34*
- *Mr. David Kemeter, Lead, Planning and Preparedness, DCMA-Homeland Defense*
- *Mr. Robert Connors, Preparedness Director, Raytheon Company*
- *Ms. Nancy Pomerleau, Exercise Director, Partnership Outreach Division, DHS-IP DIB*

**Discussion Topics:** Lesson learned and activities planned for upcoming exercises; DIB sector involvement in recent and planned exercises; Raytheon's preparedness planning and participation in national and local area exercises.

4:30-5:00pm

**Closing Remarks**

- *Mr. Jamie Clark, Director, Defense Critical Infrastructure Program, Office of the Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs; DIB GCC Chairman*

## THANK YOU TO OUR PROMOTIONAL PARTNER



CSC has an unparalleled ability to solve the critical cyber challenges our clients face. Our cybersecurity solutions are built upon an in-depth understanding of IT vulnerabilities, knowledge of cyber enemies, and proven experience building and managing enterprise networks and systems. As a trusted leader in cyber solutions around the world, CSC protects some of the nation's—and the world's—most sensitive information, systems and networks.

Drawing on our 50 years of expertise and experience, we help organizations achieve a new competitive advantage in the marketplace. Our deep understanding of cyber complexities that cover the entire cyber spectrum gives our clients the assurance they need to take action, mitigate risks and realize their full potential in this digital economy.

Our Defense Industrial Base—Security Assessment Report (DIB-SAR) solution allows contractors to address the ever changing threat environment and quickly evolving Department of Defense regulations for controlled, unclassified information programs and technologies. CSC helps DoD contractors to get a better understanding of their overall security posture and meet security requirements necessary to host CUI data. The DIB-SAR solution suite consists of three services: DIB-SAR assessment, infrastructure build-out of a corporation's IT environment to cover gaps determined in the assessment, and an executive report identifying areas of compliance with FISMA and NIST standards.

For additional information, please visit: <http://www.csc.com>.

## PROCEEDINGS

Proceedings will be available on the web through the Defense Technical Information Center (DTIC) two weeks after the conference. All registered attendees will receive an email notification once the proceedings are available.

## SPEAKER DONATION

In lieu of Speaker gifts, a donation has been made to the Wounded Warrior Project.

For additional information, please visit:  
[www.woundedwarriorproject.org](http://www.woundedwarriorproject.org).

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DEFENSE CONTRACT MANAGEMENT AGENCY



**DCMA**

ACQUISITION INSIGHT  GLOBAL ENGAGEMENT

# The Economic Crisis and Its Impact on the DIB: Defense Industrial Base Forecasts 2010-2020

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**Presented By:**

**James H Averell**

**Economist**

**DCMA Industrial Analysis Center**

**[james.averell@dcma.mil](mailto:james.averell@dcma.mil)**

**27 April 2010**



**UNCLASSIFIED**

ACQUISITION INSIGHT  GLOBAL ENGAGEMENT



- **BLUF**
- **Economic crisis history**
- **Current situation for DIB**
  - **Military Spending**
  - **NASA**
  - **Healthcare**
- **Economic forecasts and trends**
- **Additional DIB issues**
- **Final thoughts**



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# Bottom Line Up Front

## Demand

- Recession likely ended Summer 2009
- \$1T stimulus for infrastructure, tax cuts, and healthcare reform
- \$1.5T budget deficit for FY2010
- US reducing military effort in Iraq
- US surge in Afghanistan
- Healthcare reform
- Decline in Defense budget and contracting until 2020
- Investment and readiness compete for very scarce dollars against healthcare, entitlements, and economic recovery
- Aging DoD procurement workforce
- Aging and worn-out equipment

## Supply

- Recession hit the Defense and Aerospace industries in 2010
- Defense industry growth will be modest at best for next decade
- Defense industry likely to divest manufacturing capabilities
- Rising energy and raw material prices
- Labor Markets are contracting with a premium on skilled labor
- New round of Defense consolidation possible
- Increasing concentration of the DIB
- Increasing foreign ownership and dependency in lower tier industries
- Increasing spin-offs of manufacturing divisions





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# The Great Economic Crisis

Year	Events	Key Statistics
2007	<ul style="list-style-type: none"><li>•US and other housing market crash</li><li>•Declining value of the U.S. dollar</li><li>•Rising energy and materials costs</li><li>•US economy falls into recession</li><li>•Credit markets begin to freeze</li></ul>	<ul style="list-style-type: none"><li>•Estimated losses in real estate \$150-\$400B in the US</li><li>•U.S. Gov't deficit \$162B (1% of GDP)</li><li>•Fed funds at 4.5%</li><li>•Manufacturing Capacity Utilization: 79%</li></ul>
2008	<ul style="list-style-type: none"><li>•Oil and Materials markets peak then crash</li><li>•Major banks in the U.S. and Europe collapse</li><li>•Global stock markets fall by 20-60%</li><li>•Global coordinated reduction in interest rates</li><li>•U.S./Fed implements \$750 TARP and other bailouts</li></ul>	<ul style="list-style-type: none"><li>•Oil Peaks at \$150/Barrel</li><li>•S&amp;P falls 45% between Jun-Nov</li><li>•U.S. Gov't deficit \$455B (3.6% of GDP)</li><li>•U.S. GDP falls 6.2% in real terms in 4<sup>th</sup> Qtr</li><li>•Fed Funds rate falls to 0.25%</li><li>•Manufacturing Capacity Utilization: 76%</li></ul>
2009	<ul style="list-style-type: none"><li>•Stock markets continue to decline</li><li>•\$787B American Reinvestment and Recovery Act (ARRA)</li><li>•Consumers reducing debt and consumption spending</li><li>•GM &amp; Chrysler go bankrupt - \$100B+ Bailout</li><li>•Japanese, UK, &amp; European economies in deep recession</li><li>•Propose overhaul of financial regulation &amp; U.S. healthcare</li></ul>	<ul style="list-style-type: none"><li>•DJIA closes at 6594; 12yr low 2/2009</li><li>•US Gov't deficit: \$1.8T (13% of GDP)</li><li>•CPI declines first time since the 1950s</li><li>•Unemployment hits 9.5%</li><li>•Manufacturing Capacity Utilization at 65%</li><li>•140 bank failures; highest since 1992</li></ul>
2010	<ul style="list-style-type: none"><li>•Weak Recovery begins 2010 through stimulus spending</li><li>•Big Banks have recovered; smaller banks still struggling</li><li>•Sovereign Debt Crisis:</li></ul>	<ul style="list-style-type: none"><li>•US Govt Deficit \$1.5T (9.8% of GDP)</li><li>•Unemployment hits 10%</li><li>•Manufacturing Capacity Utilization at 69.2%</li><li>•50 additional bank failures</li></ul>

Source: WSJ, BLS, OMB, CBO, Federal Reserve, & Value Line – 03/2010

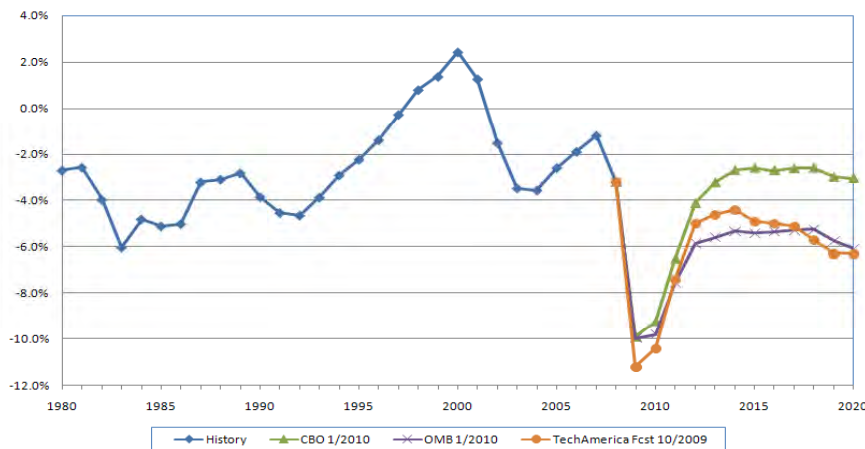




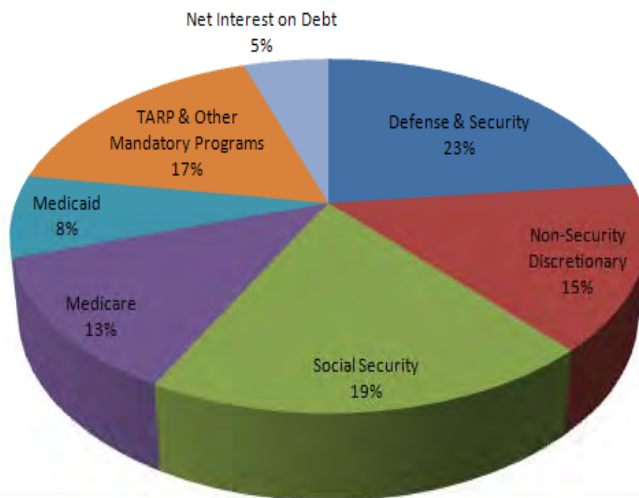
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# U.S. Federal Budget

US Federal Budget Deficits as Percentage of GDP 2000-2020



US Federal Outlays for FY2010: Total \$3.6T



## Rising Tide Deficits and Debt

- Deficit around \$1.4T for 2010 (10% of GDP)
- U.S. publicly held debt is projected to grow from 62% of GDP to 65%-82% range by 2020
- Rising government financing costs
- Falling tax revenue, rising unemployment, and healthcare costs
- Entitlement spending is projected to explode after 2018
- Growing global concerns on U.S. spending
- Healthcare reform: Historic Budget Buster?
- Bush Tax Cuts expire at the end of 2010: What tax cuts will be extended, if any?
- Japan now our largest creditor
- The \$64 Trillion Question: How long are investors willing prop up the U.S. by buying U.S. Treasury Securities?

Source: Congressional Budget Office (CBO) 1/2010, WSJ, OMB, NDIA 3/2010, Tech America, & DCMA Analysis







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# Healthcare Reform: Hope and Change

## Necessity

- Cost rising far faster than general inflation
- Rising amounts of chronic disease requiring continuing care
- Lack of IT penetration in this industry
- 45+ Million uninsured or under insured Americans
- Health issues leading cause of personal bankruptcy in the U.S.
- Reduces labor market efficiency and mobility
- US manufacturers are constrained by high health insurance costs
- Major factor in GM & Chryslers' bankruptcies
- American manufacturers must compete against foreign companies that do not have to provide health insurance
- Forces more Automation – Substitution of Labor with Capital

## Costs and Provisions

- Affordability
- Cuts to Medicare by \$500B
- Entitlement budget train wreck in 2018-2025
- Rising Medicare & other taxes
- No U.S. Tort Law reform
- Major provisions to date:
  - Full implementation in 2018
  - Requires most Americans and businesses to buy health insurance
  - Subsidizes for small business to provide health insurance to employees
  - Sets up Insurance exchanges
  - Heavily regulates health insurance providers
  - Taxes high end health insurance plans
  - Raise capital gains and taxes on incomes over 250K
  - Covers about 32M uninsured people

Source: TechAmerica 10/2008 & 10/2009, CBO 3/2010, WSJ, & DCMA Analysis



# Health Care: DIB Impact

## Impact on DoD & DIB

- Potential squeeze on DoD spending after 2013
- Health reform could slow the growth of DoD healthcare programs (TRI-Care)
- Could keeps manufacturers in business – reduces cost burden
- Could reduce overhead costs for major prime contractors
- Allows for more responsive labor markets
- Improved healthcare access may keep aging population in the workforce longer
- Higher taxation levels could discourage economic growth
- Possible increase in administrative costs impacting overhead
- Large company write-downs impacting profitability



MARCH 5, 2010

## Sovereign Debt's Hot Spots

In light of the recent focus on sovereign risk and difficulties in the periphery of Europe, economists at RBC Capital Markets assembled a snapshot of economies to distinguish those that appear to be under the most duress. Among the several measures it examined were fiscal deficits, debt loans, growth rates and inflation. The 'sovereign risk' index includes those and others. The higher the number the riskier the country. Click on column headers to sort the table.

Average	Standard deviation from z-score less than 0
Worse than average	Standard deviation between 0 and 1
Much worse than average	Standard deviation between 1 and 2
Worst compared with average	Standard deviation greater than 2

Developed Countries	Fiscal Balance (% of GDP)	Gross Public Debt (% of GDP)	Real GDP Growth %	Inflation	Sovereign Risk Index
Ireland	Much worse than average	Worse than average	Worst compared with average	Worst compared with average	0.98
Greece	Worse than average	Much worse than average	Much worse than average	Average	0.90
Portugal	Worse than average	Worse than average	Worse than average	Worse than average	0.59
United Kingdom	Much worse than average	Worse than average	Average	Average	0.52
Italy	Average	Much worse than average	Average	Average	0.43
France	Worse than average	Worse than average	Average	Average	0.37
Spain	Worse than average	Average	Much worse than average	Average	0.33
Japan	Worse than average	Worst compared with average	Average	Worst compared with average	0.28
United States	Much worse than average	Worse than average	Average	Average	0.21
Belgium	Average	Worse than average	Worse than average	Average	0.15
Austria	Average	Average	Worse than average	Worse than average	0.14
Netherlands	Worse than average	Average	Worse than average	Worse than average	0.08
Germany	Average	Worse than average	Average	Average	-0.06
Canada	Average	Worse than average	Average	Average	-0.19
Finland	Average	Average	Worse than average	Average	-0.30
Denmark	Average	Average	Average	Average	-0.45
New Zealand	Average	Average	Average	Average	-0.49
Australia	Average	Average	Average	Average	-0.52
Sweden	Average	Average	Average	Average	-0.59
Switzerland	Average	Average	Worse than average	Worse than average	-1.06
Norway	Average	Average	Average	Average	-1.32

Source: Royal Bank of Canada Capital Markets

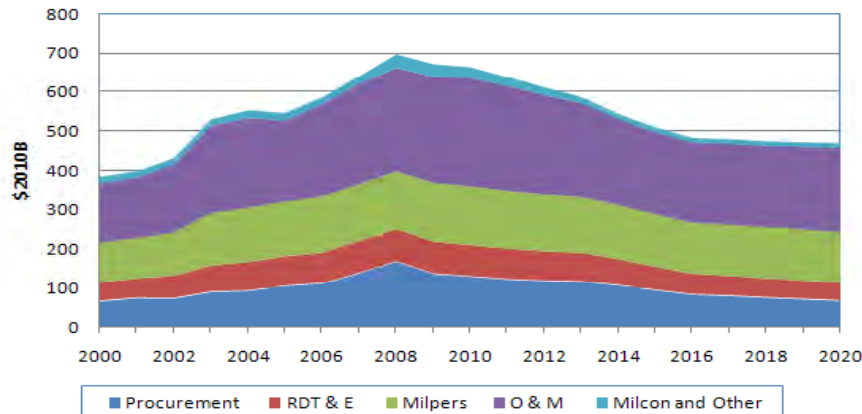
## Potential Next Steps

- Greece and European Nations are or near default on debt
- Currently the crisis is helping the US Dollar at the expense of the Euro
- Potential for new conflicts
- European Union debating a rescue package for Greece and other nations

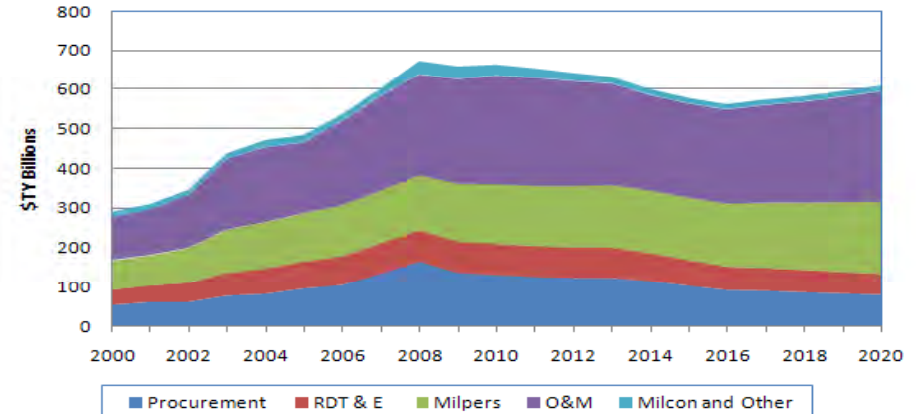


# DoD Top Line Budget: 2000-2020

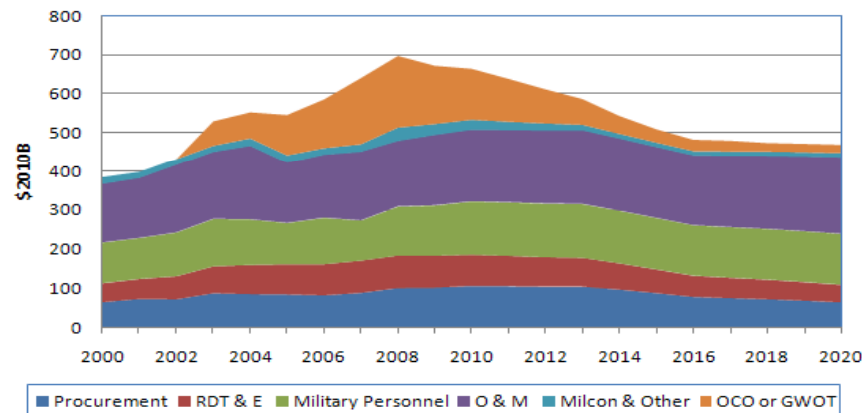
**DoD Budget by Title Trends 2000-2020  
Forecasts after 2010**



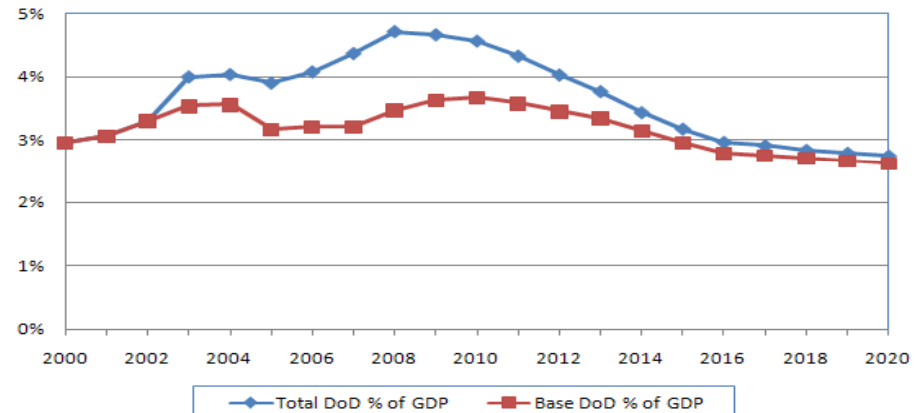
**DoD Budget by Title Trends 2000-2020 -  
Forecasts after 2010**



**DoD Base vs OCO Budget 2000-2020  
Forecasts after 2010**

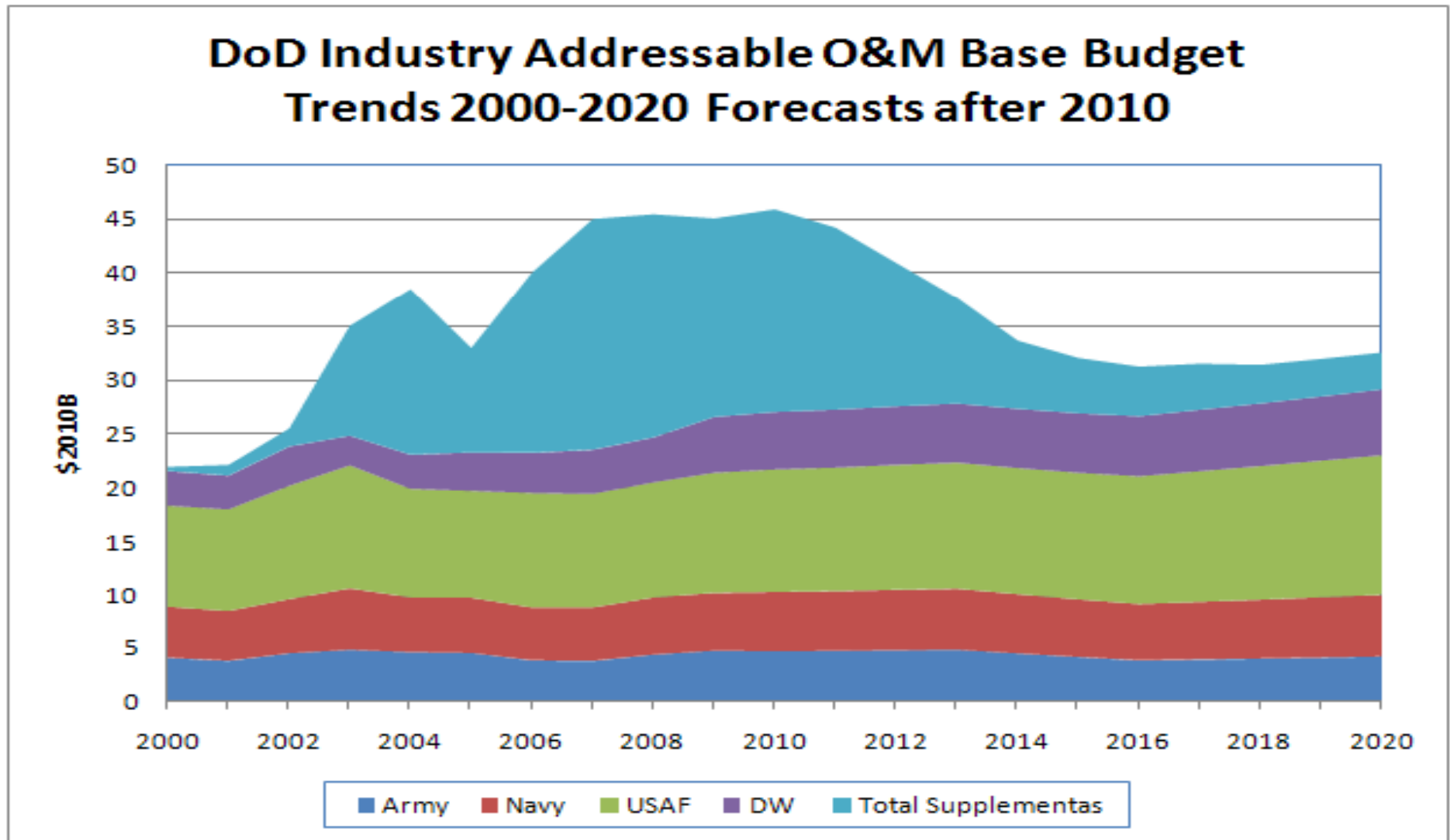


**DoD Budget Percentage of GDP Trends  
2000-2020 Forecasts after 2010**



Source: TechAmerica 10/2009 & CBO 1/2010

# Operations & Maintenance Budget



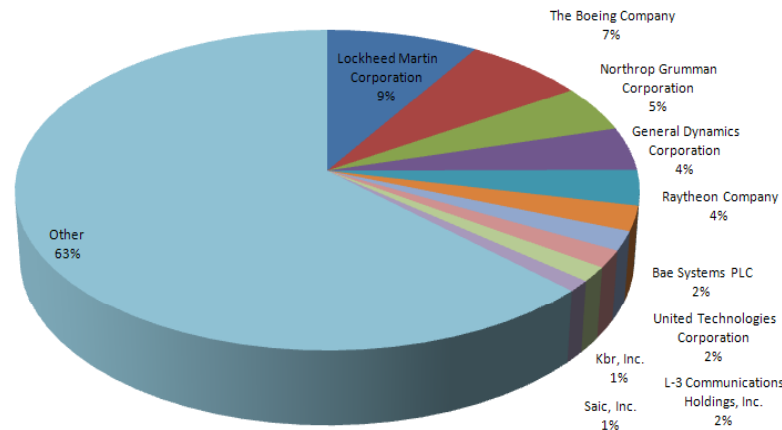
Source: TechAmerica 10/2009 & CBO 1/2010



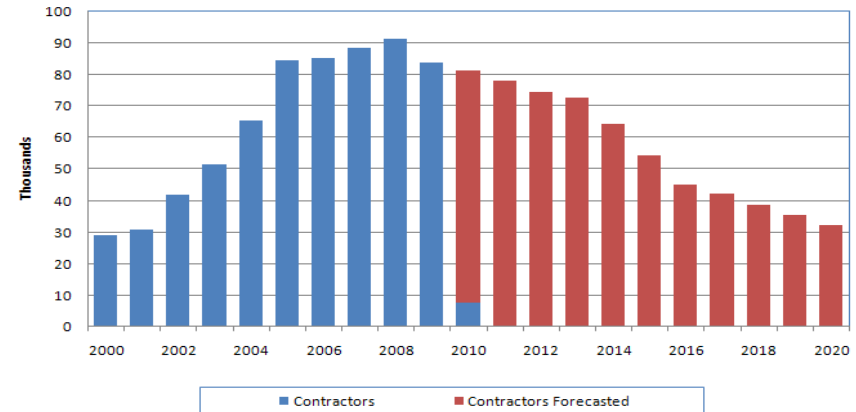
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# DoD Contracting Trends

DoD Contract Dollar Value 2000-2010: Total \$2.5T

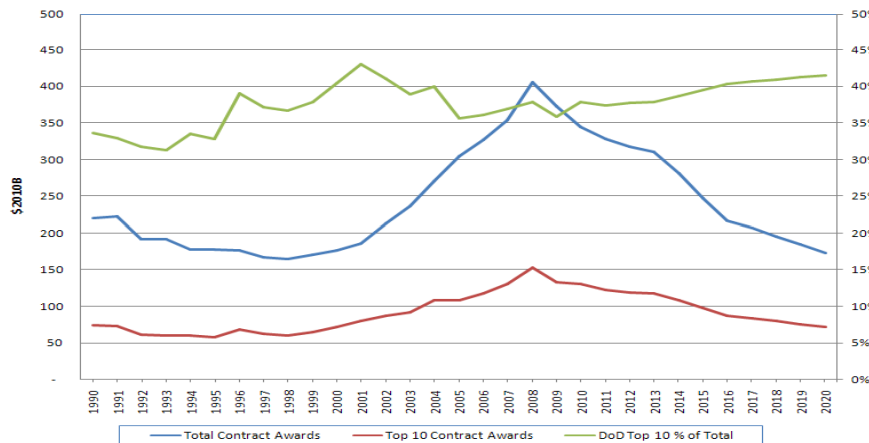


Number of DoD Contractor Trends 2000-2020



Note: Contractors defined as entities winning a contract.

Contract Award Value Trends 1990-2020 Forecasts After 2009



- Defense Industrial Base expands in terms of contracts and contractors because of the Global War on Terror
- As the wars wind down and the budget declines, the DIB will likely contract as contract awards fall
- The DIB expansion keyed by construction, consulting, and contracting out govt. functions

Source: OMB - <http://www.usaspending.gov/index.php> as of 2/2010 & Federal Executive for 1990s data





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# The QDR and Defense Budget Issues

## Quadrennial Defense Review

- First QDR to fully address wartime priorities
- Hybrid Warfare: prepare for conventional and unconventional war
- Need to take care of "Our People"
- Cyberspace domination
- Improve long range strike
- Shift to "Unmanned Systems and Capabilities" especially in aircraft
- New emphasis on cost and schedule over performance

## Aging and Recapitalization Impacts

- Aging and war damaged platforms
- Many systems are at the end of design lifetimes
- Many vehicles are obsolete and worn out
- Can only reset and re-man a vehicle so many times
- High costs and delays in acquiring new systems
- About 85% of all Military vehicles need to be recapitalized or replaced

## Defense Budget Cut?

- High deficits and domestic priorities
- Decline in perceived threat
- Many high-tech systems are behind schedule and over budget
- Shifting emphasis from high-tech to proven low tech systems
- Potential Congressional push back
- On-going wars?
- Last War vs. the Next War?

## Perceived Weaknesses in Acquisition Workforce

- Too many cost overruns
- Hollowed out procurement DoD agencies:
  - Increase of 20,000 acquisition workers
  - DCMA declines from 30,000 in 1990 to under 10,000 in 2008
  - DCMA to Hire 3,000?
- Reliance on contractor personnel
- Aging workforce in the Federal Government – average age is over 50 for most agencies

Source: DoD QDR 1/2010





# DoD Budget for 2020's

## New Defense Build-up

- 20 Year Cycle going back to 1840s
- Entitlement issues will determined DoD's budget
- New Technologies will require new systems
- 2020's budget increases not likely to match 2000's or the 1980's
- Greater emphasis on investment accounts
- Unmanned Systems (Robotics) could reduce personnel requirements and costs
- Need to maintain near-term Science & Technology (S&T) investment to reduce long-term program risk

## Priority Programs

- Aging Inventories of aircraft, ships, and vehicles
- Aircraft: F-35, UAVs, Strategic Bomber, JTR, and Tankers/Air-lift
- Operationally Responsive Space (ORS) Systems
- Shipbuilding: CGX, DDGX, LCS, SSBNs, & Auxillary Ships
- Combat Vehicles: JLTV, UGVs, Abrams, and Bradley replacements
- Missiles: Joint Common Missiles, Hypersonics, and Strategic Missiles
- Ammo & Weapons: New Infantry Rifle, Ammo, & Directed Energy
- Other: Chem/Bio Defense, Communications Gear & IT

## Questions

- Are we still in Iraq and Afghanistan?
- How will long-term budget issues be resolved?
- How well will current procurement programs for the 2010's be funded?
- Peer Competitor vs. Irregular Warfare/Hybrid Warfare
- Can and will the US maintain global military capabilities?
- Will S&T investment be maintained?
- Controlling O&M costs



# Military Technology Trends

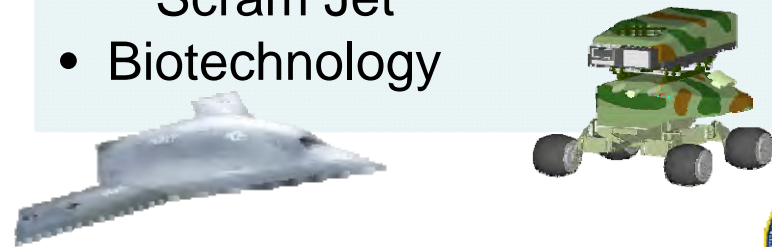
## New Technologies: 2010-2015

- IT & Digitalization
  - Mult-Core Processing
  - Terrahertz Computing
  - Cloud Computing
  - IT Security
- Nanotechnology
  - Carbon Nanotube Electronics
  - Photon Electronics
  - Motion Sensing & Simulation
  - Hull Coatings
- Sensors - LADAR/LIDAR



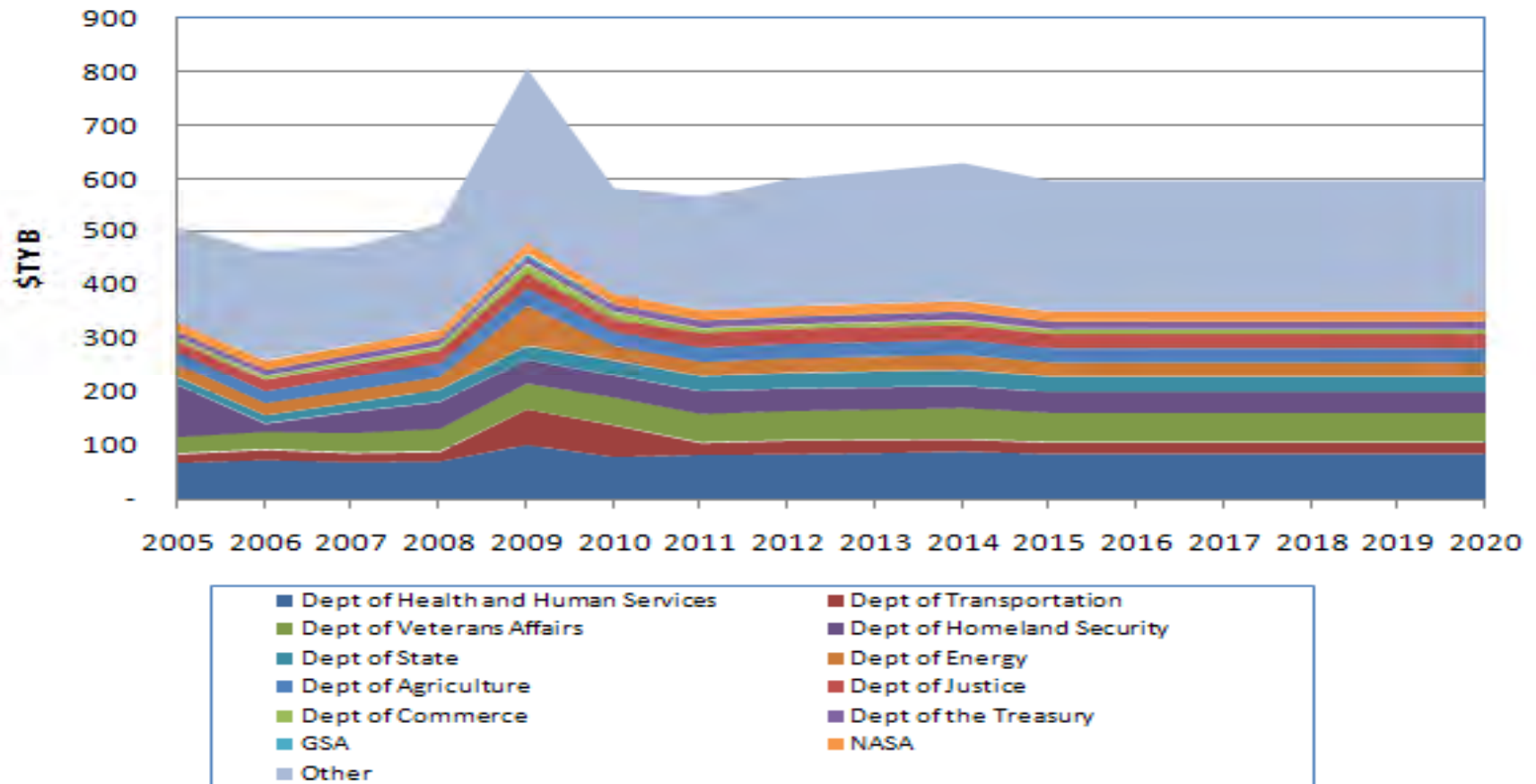
## New Technologies: 2015-2030

- Non-lethal Weapons
- Directed Energy Weapons
- Robotics
  - Unmanned Vehicles
  - Loitering Munitions
- Alternative Power Systems
  - Fuel Cell and Batteries
  - Solar Cells
- Hypersonics
  - Kinetic Munitions
  - Advanced Propulsion – Scram Jet
- Biotechnology



# Non-Defense Discretionary Budget

## Domestic Discretionary Budget Trends 2005-2020 Forecasts after 2009



Source: TechAmerica10/2009



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# Information Technology Budget Trends

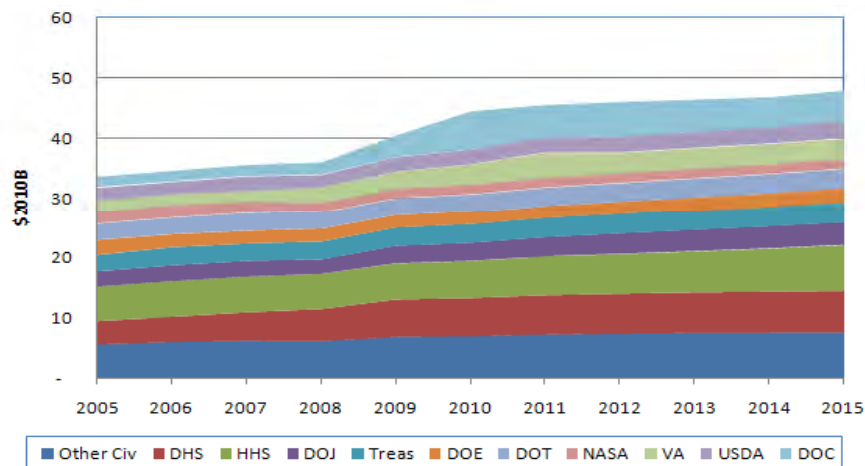
## Civil Government rise driven by:

- ARRA investment
- Healthcare reform
- Replacement of retiring workers and automation of services
- IT Security is a top priority

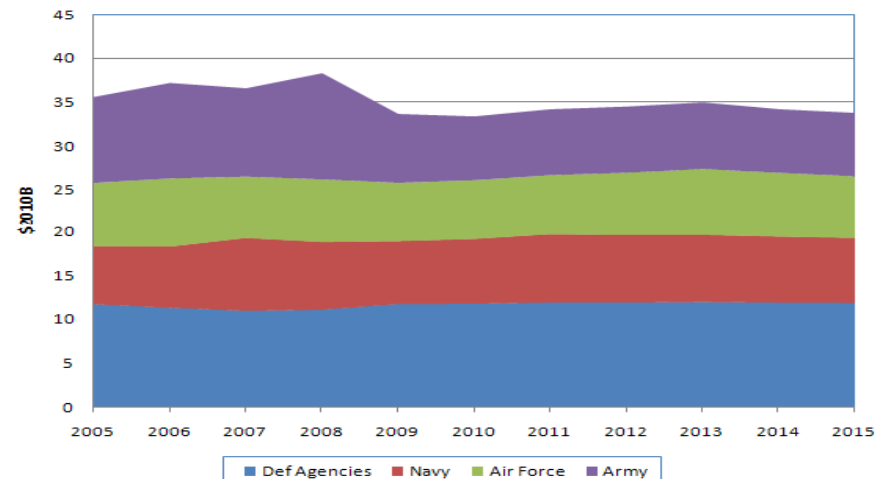
## Defense IT is basically stable

- Army IT declined in 2009 & 2010 as IT investment in support of Overseas Contingencies.
- IT investment need matches inflation over the next five years
- Continuing need to invest in the latest technology

**Civil Govt. IT Budget Trends 2005-2015**  
Forecasts after 2010



**Defense IT Trends 2005-2015**  
Forecasts after 2010

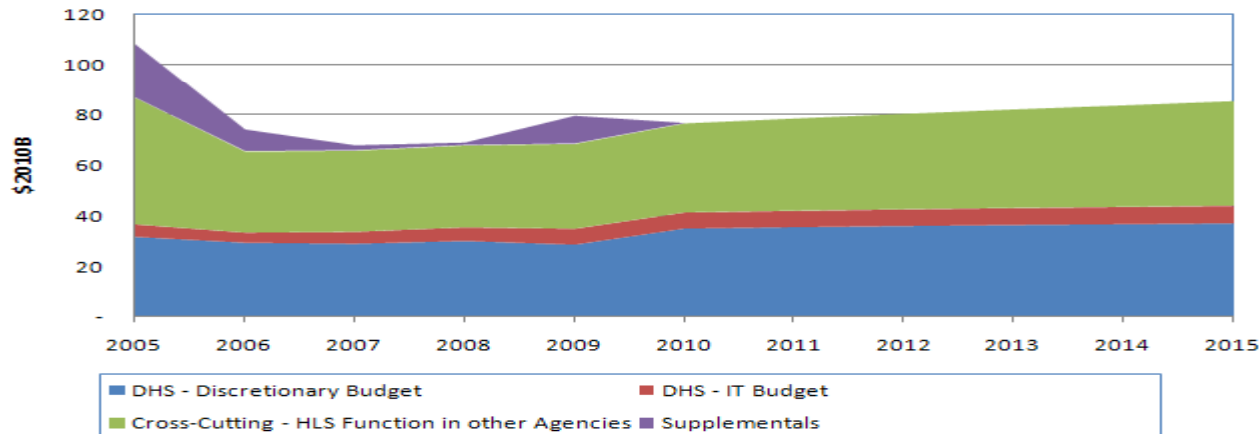


Source: TechAmerica10/2009 – Forecasts after 2008

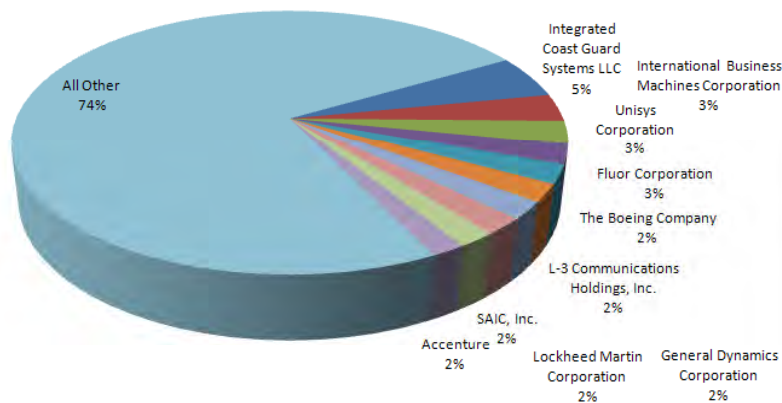


# Homeland Security Mission

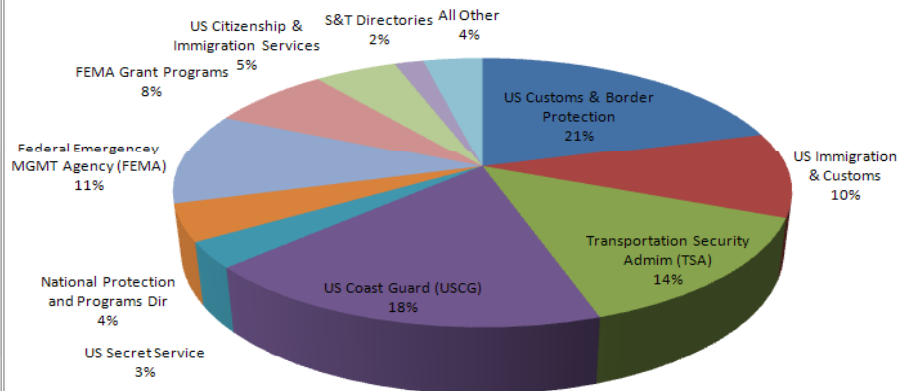
**Homeland Security Budget Authority 2005-2015  
Forecasts after 2010**



**Department of Homeland Security (DHS) Contracting  
2000-2010 Total of \$84.9B**



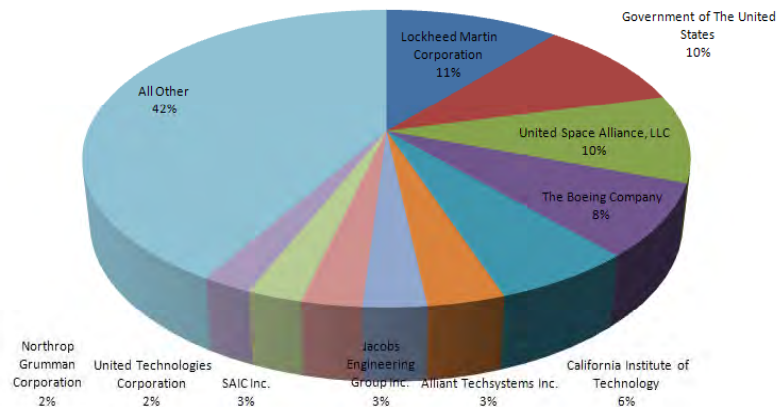
**FY2010 Budget for Department of Homeland Security:  
Total \$55.4B**



Source: DHS TechAmerica10/2009 & OMB - <http://www.usaspending.gov/index.php> - 2010 is partial year for actual as of 3/2010

# NASA: Is it Change or the End?

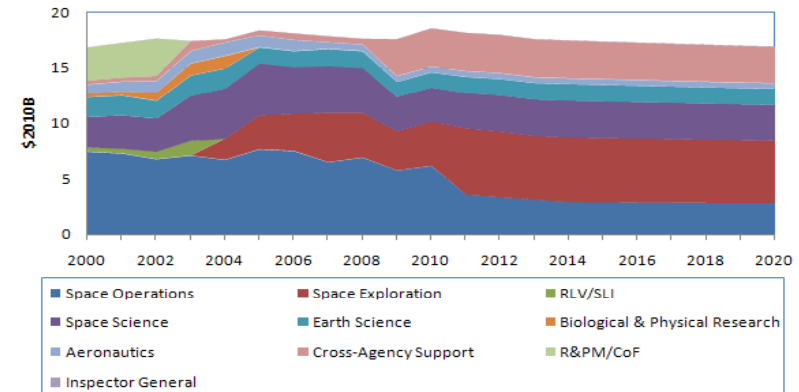
NASA Total Contracts 2000-2010: Total \$115.3B



## Obama's Space Policy

- International Space Station (ISS) operates to 2020 and beyond
- Constellation cancelled as recommended by the Augustine Commission
- Focus on new technology development and launch facilities
- Shift in focus from established contractors to new start-ups
- Space contractors are assume greater amounts of program development and operational risk
- Obama's budget adds \$6B over the next 5 years
- Robust Planetary and Earth Observation program

NASA Budget Trends by Category 2000-2020  
Forecasts after 2010



## Looming Gap with no U.S. Manned Space Vehicle available for 5+ years:

- NASA to retire the Shuttle in 2010/11
- No true Shuttle replacement vehicle possible before 2020
- Shift ISS supply and personnel ferrying missions to private sector contractors.
  - Space Ex – Falcon LV and Dragon Capsule are leading candidates
- Orion continues as a lifeboat for the ISS
- NASA's Man Rating requirements presents significant technical and cost challenges in developing manned space systems

Source: TechAmerica10/2009 - OMB - <http://www.usaspending.gov/index.php> - 2010 is partial year for actual as of 2/2010

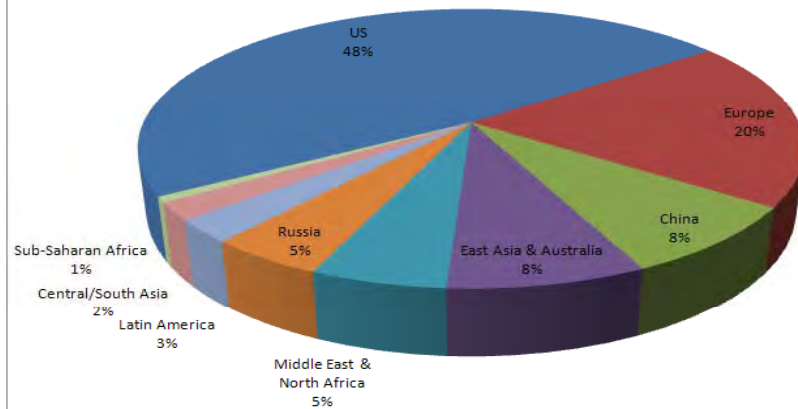




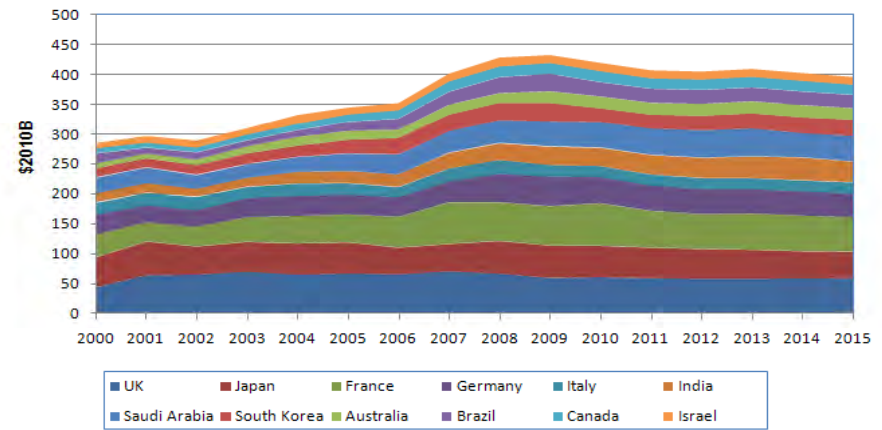
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# International Defense Budgets

Global Defense Spending for 2009 Total \$1.5T



Defense Budgets of Large Non-US Defense Markets 2000-2015 - Forecasts After 2009



## Defense Budgets Peaked in 2008

- Aging equipment
- Interoperability with the U.S.
- Increasing international cooperation on defense programs: F-35 & MEADS
- Global Economic Crisis is reversing the trend

## Defense spending is shifting from Europe to Asia

- Asian economies will have the money, population, and requirements
- Increasing security risks and threat perceptions in Asia

## U.S. Exports are hampered because of the following:

- U.S. Systems are often too complex and costly
- Cheaper foreign alternatives
- Offset requirements
- U.S. Export controls are outdated

Source: TechAmerica 10/2002 & 10/2005, CIA, Forecast Int 3/2010, & DCMA Analysis





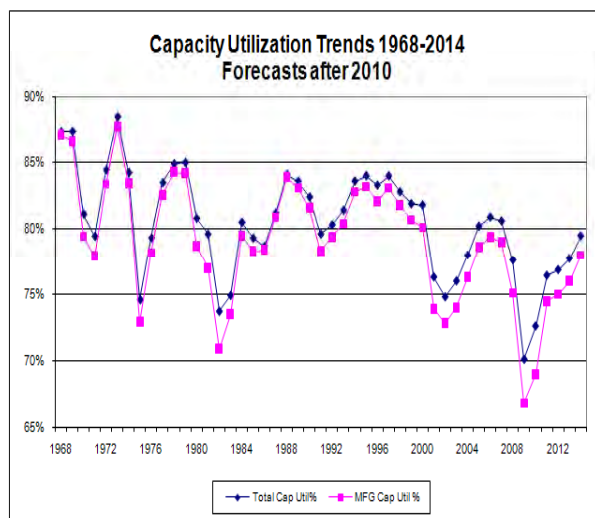


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# Crisis Impact on the DIB

## Falling Output & Rates of Capacity Utilization

- Total manufacturing rate reached post WWII lows
- Hollowing out of US Industrial Base
- DIB utilization starting to decline
- China could overtake the U.S. in manufacturing by 2020



## Frozen Credit Markets

- Small companies having difficulties securing financing for contracts
- Larger companies paying more for financing operations
- Little M&A activity except for small cash deals
- Increases in bankruptcies and liquidations

## High Unemployment

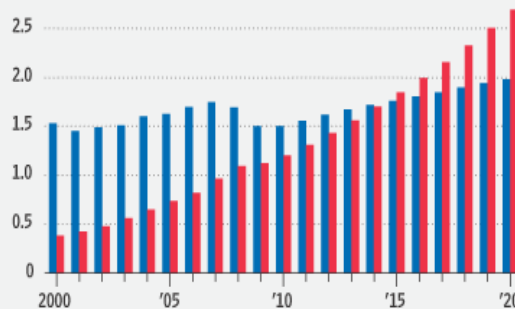
- 10M+ jobs lost since Dec 2007
- Migration concerns
- Major Defense firms have started cutting jobs
- Delaying retirements and early retirement
- Rising unemployment and under-employment
- High cost of health insurance

## Pulling Ahead

Real value-added manufacturing

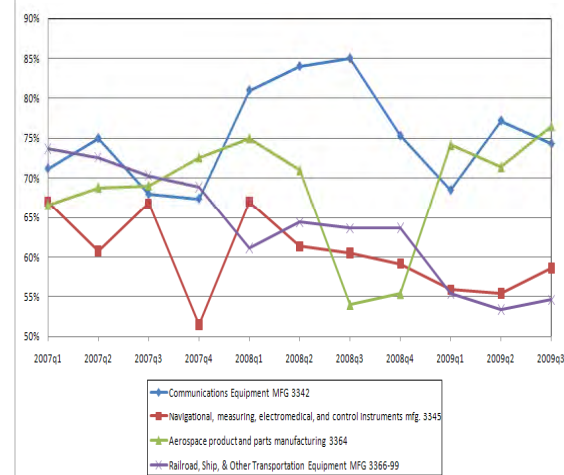
■ U.S. ■ China

\$3.0 trillion



Note: Projections start in 2009. Source: Global Insight

## Defense Industries Capacity Utilization Trends 2007-2009



Source: WSJ, Value Line, DCMA, Industrial Analysis Center, Federal Reserve, Census, & DCMA Financial Analysis Group

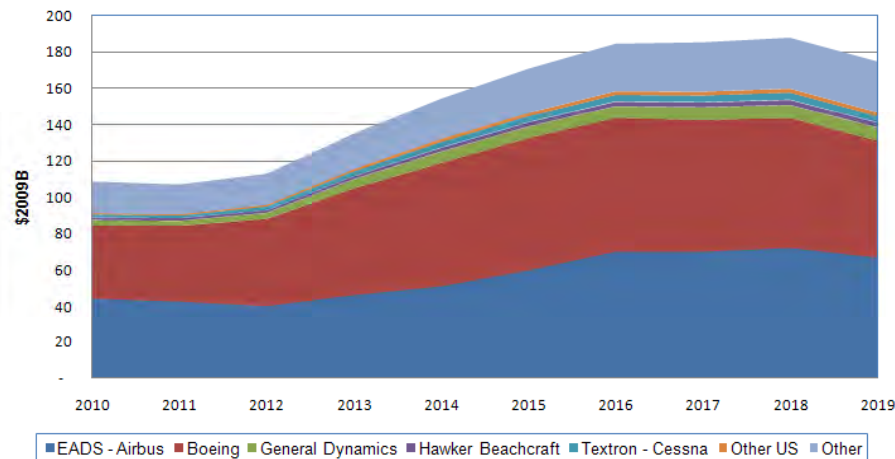




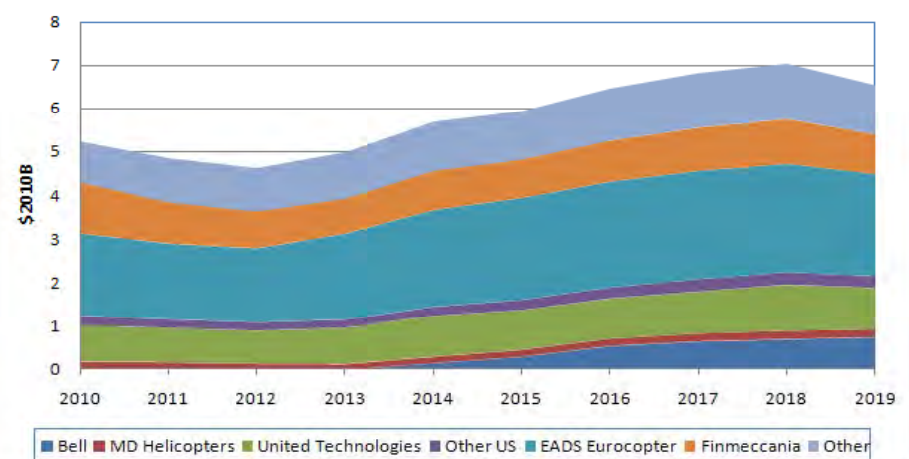
# Commercial Aircraft Production Trends

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Civil Fixed Wing Value of Production 2010-2019



Civil Helicopter Value of Production 2010-2019



## Boom times are at an end

- Global Financial Market Meltdown in 2008
- Delays in deliveries
- Record low order intake in 2009
- Falling demand for business jets and general aviation aircraft
- Significant Supply Chain and Material Cost issues

## Shallower down-turn

- Market expansion in the Middle East and Asia
- Aging aircraft, high fuel costs, and environmental concerns
- New models (787 & A350) from Boeing and Airbus to address above issues
- After declines in 2009, backlog still provides cushion

## Defense Industrial Base Impact

- Workload stable for now but will likely decline in 2010
- Employment is likely to fall in 2010 but stable through 2016
- Concerns over sub-tier producers
- Rising overhead cost in the future

Source: Forecasts International 03/2010 & DCMA Analysis





# Defense & Aerospace Market Forecasts

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Forecast International Defined Aerospace and Defense Systems Markets	Units						Value of Production in \$2009M					
	2010	2019	Total	% Change	CAGR*	US%**	2010	2019	Total	% Change	CAGR*	US%**
<b>Military Markets</b>												
Fixed Wing Military Aircraft	647	644	6,380	-0.5%	-0.1%	42%	29,588.1	34,777.4	320,252.6	17.5%	1.9%	53.1%
Military Helicopters	584	558	6,114	-4.5%	-0.5%	44%	10,213.1	9,478.3	111,036.6	-7.2%	-0.8%	62.0%
Launch Vehicles	40	22	300	-45.0%	-5.0%	36%	2,575.7	1,262.1	18,577.4	-51.0%	-5.7%	61.9%
Satellites	15	5	90	-66.7%	-7.4%	61%	2,820.5	440.0	21,968.1	-84.4%	-9.4%	72.2%
Unmanned Systems	9,943	8,255	85,028	-17.0%	-1.9%	39%	3,247.3	3,530.9	34,532.9	8.7%	1.0%	51.2%
Aircraft Engines - Gas Turbines	3,052	1,650	26,263	-45.9%	-5.1%	59%	5,570.7	5,282.6	56,027.3	-5.2%	-0.6%	56.0%
Military Vehicles	31,395	9,565	127,413	-69.5%	-7.7%	71%	15,725.5	8,067.2	102,247.5	-48.7%	-5.4%	37.8%
Warships	24	27	340	12.5%	1.4%	34%	17,146.0	17,530.0	243,526.9	2.2%	0.2%	46.9%
Missiles	47,328	32,447	368,788	-31.4%	-3.5%	25%	9,092.5	10,673.8	99,615.0	17.4%	1.9%	23.7%
Munitions & Weapons	662,100	457,461	5,227,804	-30.9%	-3.4%	71%	2,668.4	1,496.9	18,200.4	-43.9%	-4.9%	70.4%
Naval Systems	65,241	3,113	116,275	-95.2%	-10.6%	79%	1,457.1	782.1	10,454.2	-46.3%	-5.1%	36.4%
<b>Civil Markets</b>												
Fixed Wing Aircraft	3,520	5,794	49,930	61.0%	6.8%	50%	108,892.7	174,551.5	1,520,339.7	60.3%	6.7%	48%
Civil Helicopters	1,559	1,858	16,641	19.2%	2.1%	50%	5,237.8	6,537.2	58,171.7	24.8%	2.8%	27%
Aircraft Engines - Gas Turbines	8,024	10,555	97,915	31.5%	3.5%	57%	21,110.2	30,050.7	279,728.1	42.4%	4.7%	72%
Launch Vehicles	54	52	489	-3.7%	-0.4%	18%	3,229.7	4,213.4	47,645.3	30.5%	3.4%	40%
Satellites	66	18	589	-72.7%	-8.1%	23%	5,997.0	2,242.0	72,296.6	-62.6%	-7.0%	35%
<b>Combine Markets - Civil + Military</b>												
Fixed Wing Aircraft	4,167	6,438	56,310	54.5%	6.1%	49%	138,480.8	209,328.9	1,840,592.2	51.2%	5.7%	49%
Helicopters	2,143	2,416	22,755	12.7%	1.4%	48%	15,450.9	16,015.5	169,208.3	3.7%	0.4%	50%
Aircraft Engines - Gas Turbines	8,064	10,577	98,215	31.2%	3.5%	57%	28,059.7	35,179.4	318,393.0	25.4%	2.8%	69%
Launch Vehicles	94	74	789	-21.3%	-2.4%	24%	5,805	5,476	66,223	-5.7%	-0.6%	46%
Satellites	81	23	679	-71.6%	-8.0%	28%	8,818	2,682	94,265	-69.6%	-7.7%	44%

Source: Forecast International 2/2010 - [www.forecast1.com](http://www.forecast1.com) Note: \* CAGR - Compound Annual Growth Rate, \*\* US% - US Based Producers Market Share





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# Other Industrial Base Issues

## Aging Workforce

- Crisis has delayed retirements and brought people back to the workforce
- Highly skilled workers will be in short supply, especially, engineers, scientists, and computer personnel
- Traditional "Defined Benefit" retirement programs are being replaced by 401K "Defined Contribution" programs

## Labor Migration

- To contain costs, manufacturing work is shifting out of the Midwest, Northeast, and Pacific States to interior South and Southwestern states
- Many Aircraft and Spacecraft production facilities are over 50 years old
- Differences in cost of living and taxation driving worker and company migration trends.

## Foreign Sourcing and Ownership

- Falling dollar encourages foreign sourcing and mergers with foreign partners
- US DIB is being hollowed out by foreign dependencies for key components
- Industrial "Know How" is moving overseas
- Infrastructure, healthcare issues, lack of skills, tax climate, and regulations hinder competitiveness

## Energy & Material Costs and Availability

- Plunge in oil prices
- Inflation could return
- Reduction in mining capacity and slowing of the growth of energy production
- China and India are still growing
- Current recession slowing the growth of energy & mining productive capacity
- ARRA has money for Alternative Energy development





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# U.S. Defense Consolidation Outlook

## Thawing merger & acquisition market

- Frozen credit markets in 2008 are now beginning to thaw
- Budget uncertainty created by QDR and lack of guidance from DoD
- Budget cuts could spur a new round of consolidation in the next decade
- Private Equity Investment companies could dump defense companies

## Technology & Policy Change Creates Growth

- Growth of UAV's will bring Aircraft players into the market
- Operationally Responsive Space (ORS) allows for Small Satellites and Launch Vehicle use by DoD
- Foreign competition and penetration in US DIB is possible

## Manufacturing facility consolidation

- Prime contractors focusing on design, integration, and service providing at the expense of manufacturing
- Aging facilities with aging workforces in high cost geographical areas
- Need to maximize shareholder value
- Supply chain issues could mitigate this trend



## Points to Ponder

- Recession is likely over but the recovery is weak
- Administration fiscal policy along with monetary policy is extremely expansive and will have significant long-term impact on the economy
  - Stimulus in 2009
  - Healthcare Reform
- Defense top line is going to take cuts: How Much and When?
- The QDR repeats many policies and goals expressed over the past 20 years
  - New Urgency on cost containment and schedule
  - Preparation for a multiple types of warfare
  - Emphasis on IT and Cyberwarfare
- DIB is in good shape to weather this down-turn





# National Infrastructure Protection Plan (NIPP) Partnership Model and Cross Sector Cyber Security Working Group (CSCSWG)

DIB CIP Conference, 27 April 2010



Guy Copeland, Vice President  
Information Infrastructure Advisory Programs and  
Special Assistant to the CEO, CSC

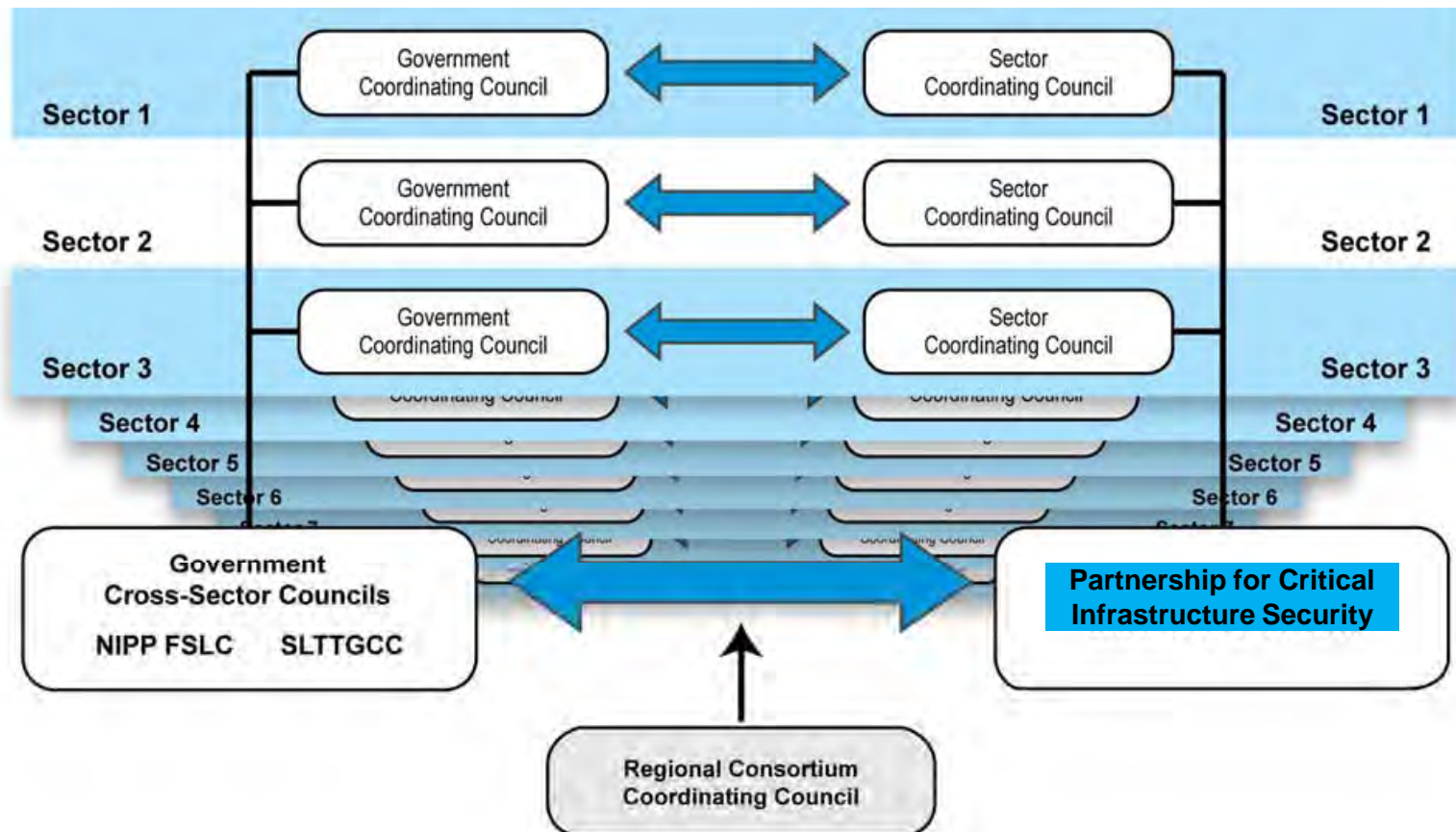




# Sector Partnership Model

## National Infrastructure Protection Plan (NIPP)

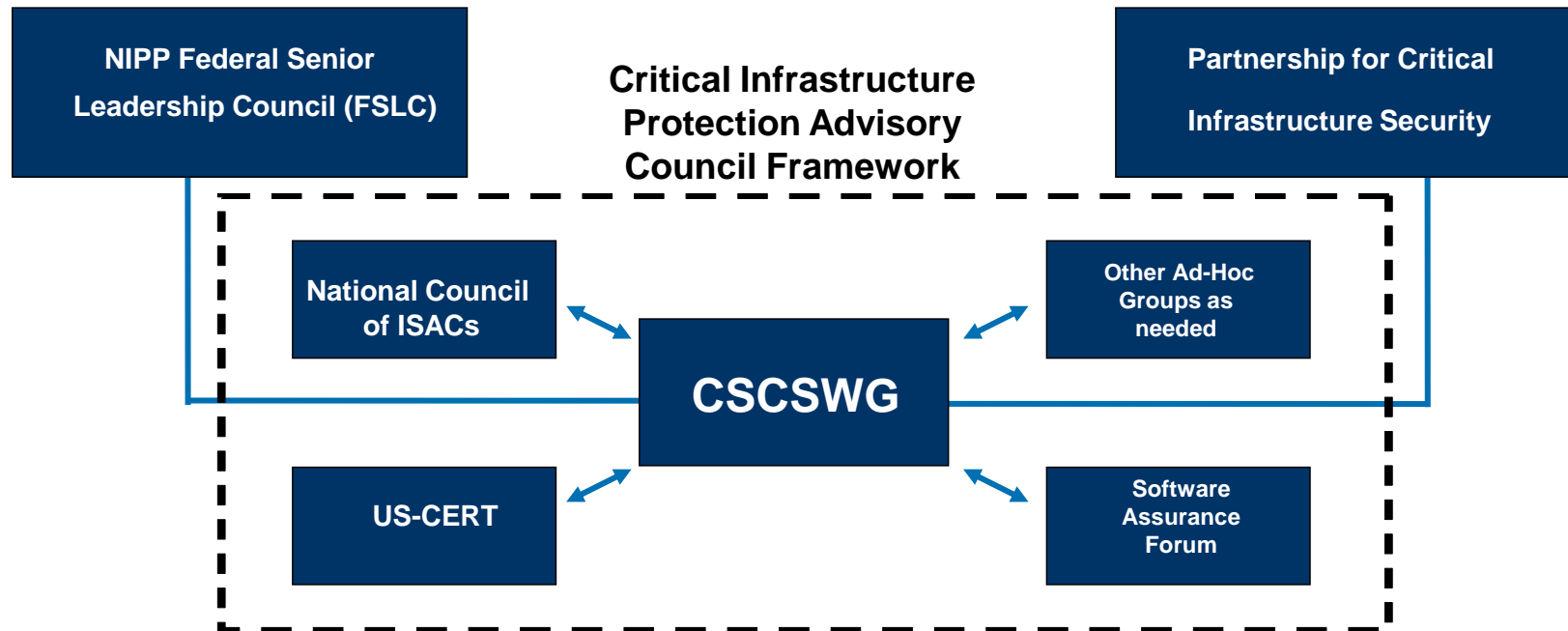
### Critical Infrastructure Partnership Advisory Council (CIPAC)







# Cross-Sector Cyber Security Working Group CIPAC Framework and Liaison Groups





# *The National Guard Bureau Critical Infrastructure Program in Conjunction with the Joint Interagency Training and Education Center*

Brigadier General James A. Hoyer

Director Joint Staff

West Virginia National Guard

and

Colonel Thomas McGinley

Provost Marshal J34

National Guard Bureau

**This briefing is**

**UNCLASSIFIED**

As of 23 APR 2010



# *Authorities*



- **Homeland Security Presidential Directive-7 (HSPD-7)**
  - **December 17, 2003**
- **Defense Critical Infrastructure Program (DCIP), (DoDD 3020.40)**
  - **January 14, 2010**
- **National Infrastructure Protection Plan (NIPP)**
  - **June 2009**



# *National Guard CIP-MAA Teams*



- **Critical Infrastructure Protection- Mission Assurance Assessment (CIP-MAA) Teams conduct assessments in support of the DoD Defense Industrial Base (DIB)**
  - All-hazard, vulnerability assessments of DIB sites deemed critical by Assistant Secretary of Defense (HD/ASA)
  - Teams are composed of 9 National Guard Soldiers and Airmen
  - Standardized report allows Defense Contract Management Agency (DCMA) to build a common operational picture for risk management decisions
  - Historical data will allow DCMA to begin trend analysis

**Desired Effect: DoD executes wartime missions regardless of man-made or natural hazards to critical DIB sites**



# NG CIP-MAA Team Locations



- 6 Assessment teams initially developed
- Concept was validated by Joint Requirements Oversight Council (JROCM 29 Jan 07)
- 3 Teams fielded to support Defense Industrial Base (DIB) mission







# *NG CIP-MAA Team Composition*



- **3 Nine-Person CIP-MAA Teams authorized to support the Defense Critical Infrastructure Program**
- **Teams are Comprised of:**
  - ☐ **Team Leader**
  - ☐ **Mission Analyst**
  - ☐ **Electric Power Analyst**
  - ☐ **Transportation Analyst**
  - ☐ **Communications Analyst**
  - ☐ **HVAC Analyst**
  - ☐ **Natural Gas and Petroleum Analyst**
  - ☐ **Chemical and Water Analyst**
  - ☐ **Security and Emergency Management Specialist**



# *NG CIP-MAA Team Training*



- **Team members receive:**
- **Defense Critical Infrastructure Protection Assessment Methodology Training**
  - ❑ **Mission Assurance based training**
  - ❑ **Phase I - 5 Days classroom training**
  - ❑ **Phase II - On-the-Job training assessment**
- **JITEC - Enhanced Comprehensive Assessment Model Training**
  - ❑ **Antiterrorism / Force Protection based training with an all-hazards approach**
  - ❑ **5 Days classroom instruction and a 5 day mock assessment**



## *NG DHS CIP Teams*



- **Department of Homeland Security Critical Infrastructure Protection Assessment (DHS CIP) Teams**
  - Teams are composed of 3 NG Soldiers and Airmen
  - All-hazard, vulnerability assessments of critical DHS sites
  - Standardized reports will allow DHS to build a common operational picture for risk management decisions
  - These teams differ from CIP-MAA teams due to training and assessment requirements
  - 1 Three-Man Standard Evaluation Assessment Team (SEAT) for the evaluation of NG DHS CIP teams and assessment execution

***Desired Effect: Enables DHS to refine threat mitigation strategies of sites, critical to the United States***



# NG DHS CIP Team Locations



- 19 teams selected to support DHS
- 18 teams trained
- 1 team currently completing member selection
- At least 1 team per FEMA region





*QUESTIONS?*





**DCMA**

# **Defense Critical Infrastructure Programs (DCIP)**

## **Mission Assurance Assessment**

**•Presented By:**

**Steve Turdo – DCMA Industrial Analysis Center**  
**Maj Scott White – NY National Guard**  
**2Lt Jeremy Samples – WV National Guard**  
**1SG Jon Huddleston – CO National Guard**

**•February  
2010**



# Outline

- DCMA Planning
- Advance Visit – Mission Analyst
- Supporting Foundational Infrastructure Analyst Duties
- MAA Report process
- 12 Month follow up

# DCMA Planning

- Initial Company Contact
- IAC Industrial Capabilities Assessment
- Letter of Intent to Company
- MOA between IAC and Company
- Number of contacts / visits prior to assessment
- Security Operations & Emergency Management
- National Guard Teams
- Lessons learned



# Pre Assessment

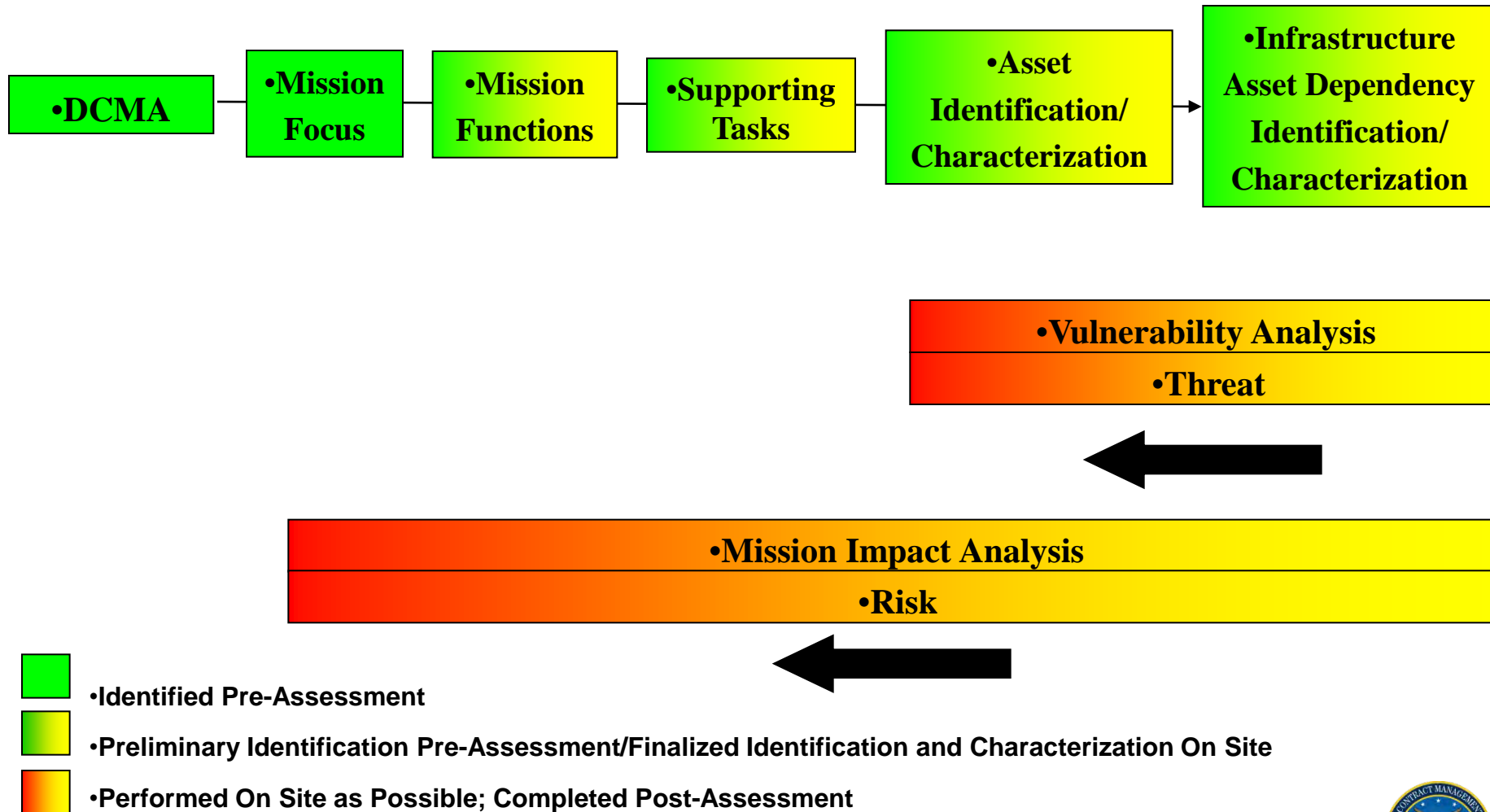
# The Team

- DCMA Responsibilities
- Team Construct
- Team Leader Responsibilities
- Mission Analyst Responsibilities
- SFIN Responsibilities



- Understanding the Mission
- Interacting with the Company
- Interacting with DCMA
  - IAC
  - CMO
- Developing the Mission Map

# Mission Focused Assessment Summary





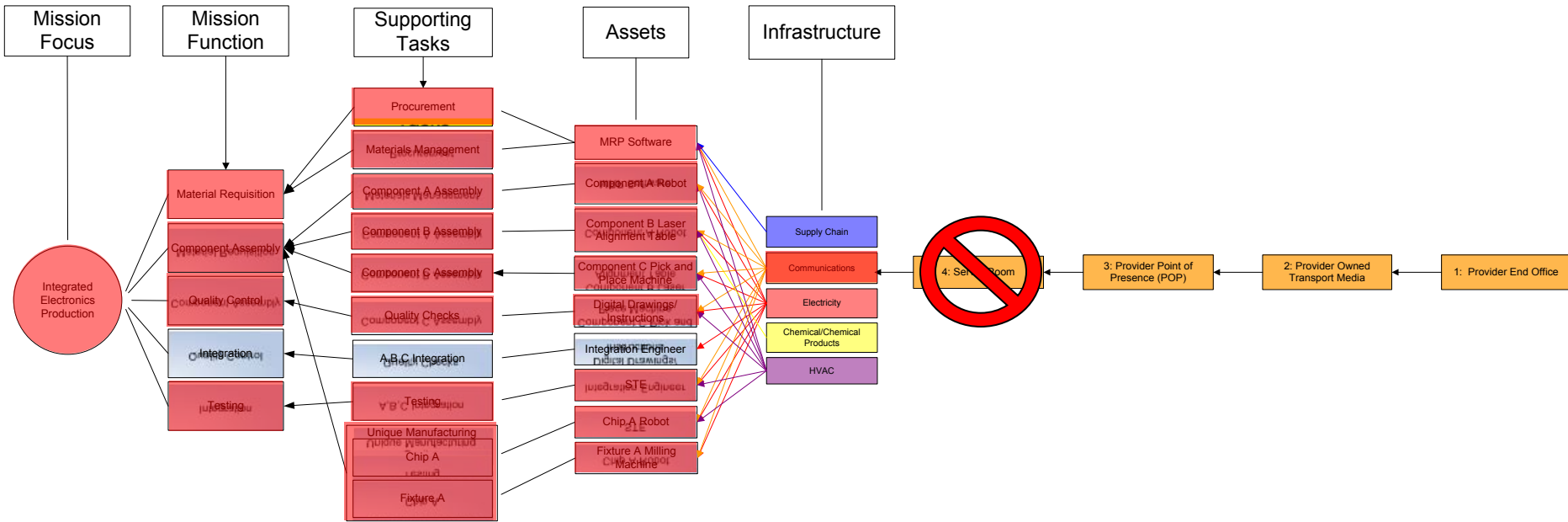
# Assessment

- In Brief / Meet and Greet
- Mission Focus Production Tour
- Production Infrastructure Dependencies Tour
- Interviews / Data Collection
- Daily Hot Washes
- Mission Focus Mission Map Finalization
- Supporting Foundational Infrastructure Network Mission Map Development
- Mission Impact Analysis



# Mission Impact Analysis







# Post Assessment

- Out brief (in process review)
- Steps upon return
- Contacting site for additional information
- Length of Report & Report writing for each section
- Final Product
- DCMA submission & review

- Refine report writing tool
- CIP-MAA team Conference
- Regional Resiliency Assessment Program (RRAP)
- Develop FY11 assessment schedule
  - By APM ranking
  - Continue to assess weapons platforms
  - DIB geographic concentration

# Questions?



# Thank You





**DCMA**

# 2010 DIB★CIP

## Panel Discussion

### DIB Sector Involvement in Recent & Planned Exercises

---

**Panel Moderator:**

**Colonel Paul T. Ahern, USAR**  
Director, Joint Reserve Response Team  
Homeland Defense Operations Division  
DCMA – Industrial Analysis Center (IAC)

**Wednesday, April 28, 2010**

- **Panel Members:**
  - **Mr. John Schaufert**, Assessments Branch Chief, Force Protection & Mission Assurance Division, U.S. Northern Command J-34
  - **Ms. Nancy Pomerleau**, Executive Director, Partnership & Outreach Division, Department of Homeland Security Infrastructure Protection
  - **Mr. David Kemeter**, DIB Preparedness Program Manager, Defense Contract Management Agency, Industrial Analysis Center Homeland Defense Operations Division
  - **Mr. Robert Connors**, Preparedness Director, Raytheon Company

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- **DCMA Industrial Analysis Center:**

- **FY 09 – Exercise Involvement**

- IAC Homeland Defense Operations Division - Annual Preparedness Exercise
    - US NORTHCOM - Ardent Sentry Exercise
    - DHS – National Level Exercise 2009
    - BAE Greenlawn, NY (Suffolk County) – TTX

- **FY 10 & 11 – Exercise Involvement**

- US NORTHCOM – Vigilant Shield 10
    - IAC-HDAT - Small Exercise IAC-09-001 (JRT)
    - US Army War College – Strategic Decision Making Exercise
    - DHS - National Level Exercise 2010
    - IAC Homeland Defense Operations Division – Annual Preparedness Exercise
    - US NORTHCOM – Ardent Sentry
    - US NORTHCOM Vigilant Shield 11
    - DHS - National Level Exercise 2011

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- **DCMA Industrial Analysis Center:**
- **DIB Sector: Tiered Reserve Force Augmentation Plan**
  - Tier 1 – IAC Homeland Defense Operations Division Civilian Workforce
  - Tier 2 - Navy Reservists
  - Tier 3 - Army Reservists
  - Tier 4 – TBD



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# ***USTRANSCOM Critical Infrastructure Program (CIP)***

***28 April, 2010  
Jake Carson, CIP Branch Chief  
TCJ3-FC***

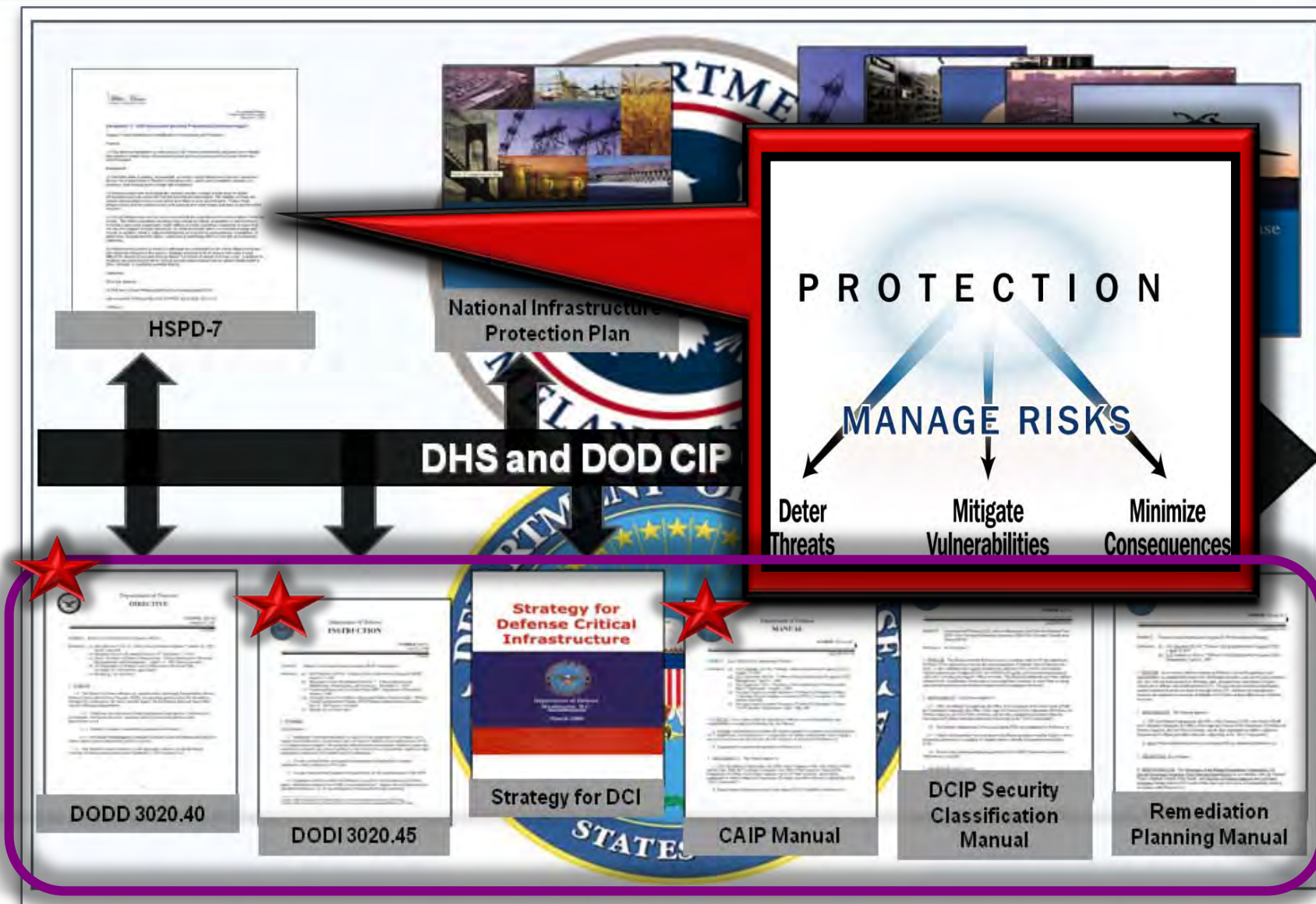
***wayne.carson@ustranscom.mil  
(618) 256-4446***







# DCIP Roles and Responsibilities (Cont)





# *DCIP Roles and Responsibilities (Cont)*

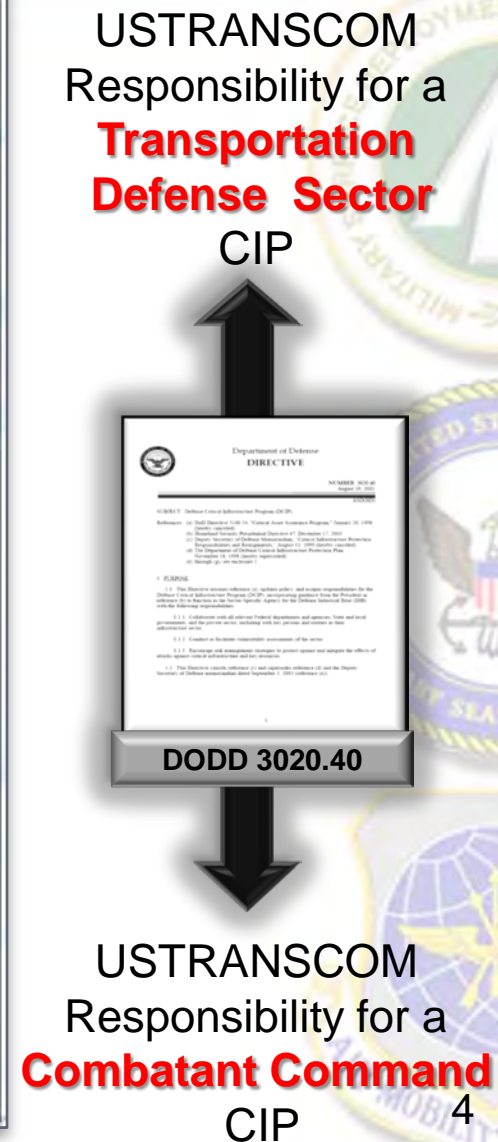
## National Program – Consequence focused

- Critical Infrastructure **Protection** (CIP)
- Critical Infrastructure / Key Resources (CI/KR)
  - Loss of life
  - Economic Impact

## DOD Program – Mission focused

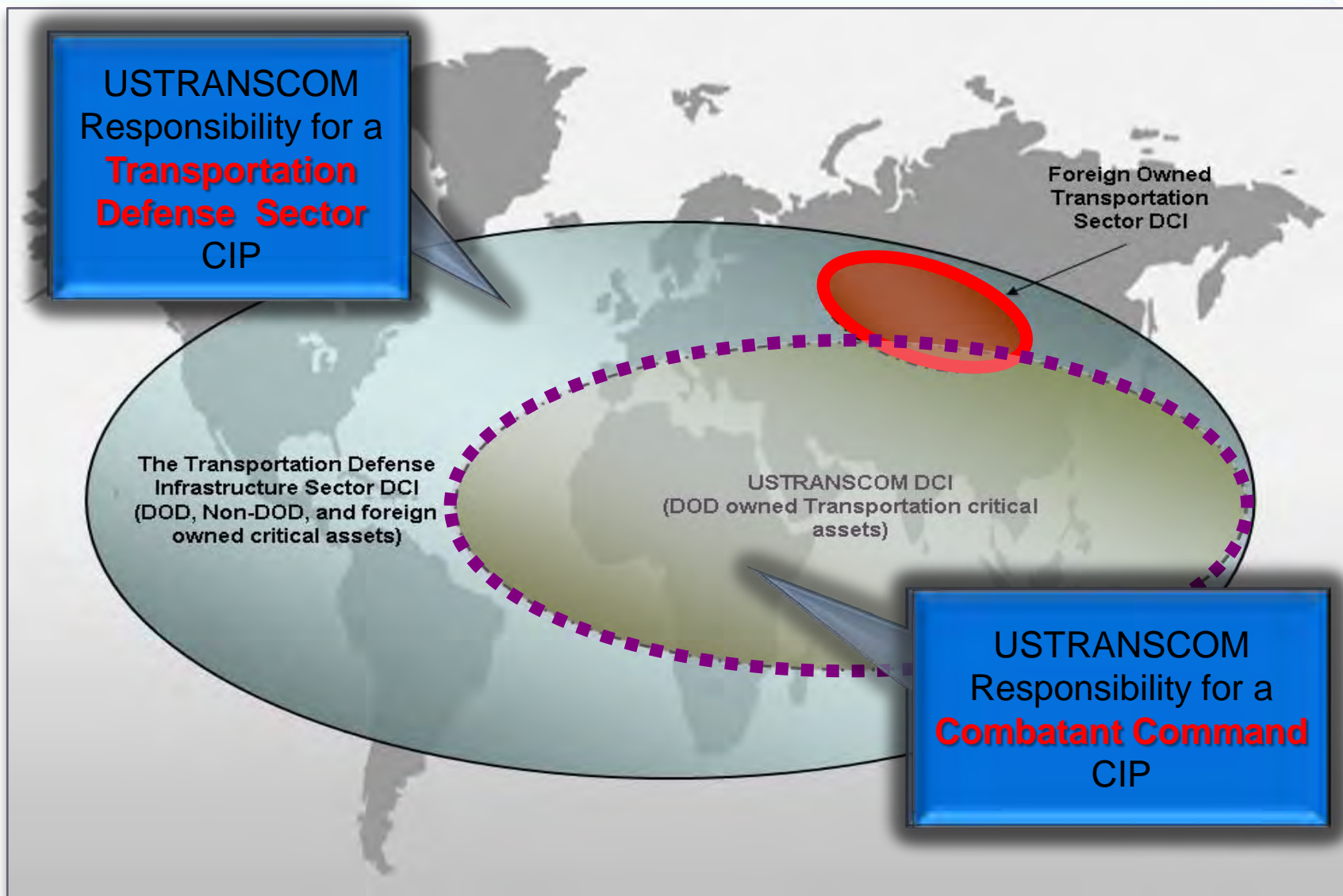
- Defense Critical Infrastructure **Program** (DCIP)
- Defense Critical Infrastructure/Asset (DCI)/(DCA)
  - Mission Failure or Degradation
    - Specific Mission Essential tasks by identified Operation Plans
  - Function Failure or Degradation
    - Move Cargo, Move Passengers, Move Patients, and Provide C4
  - Essential to Mission Assurance





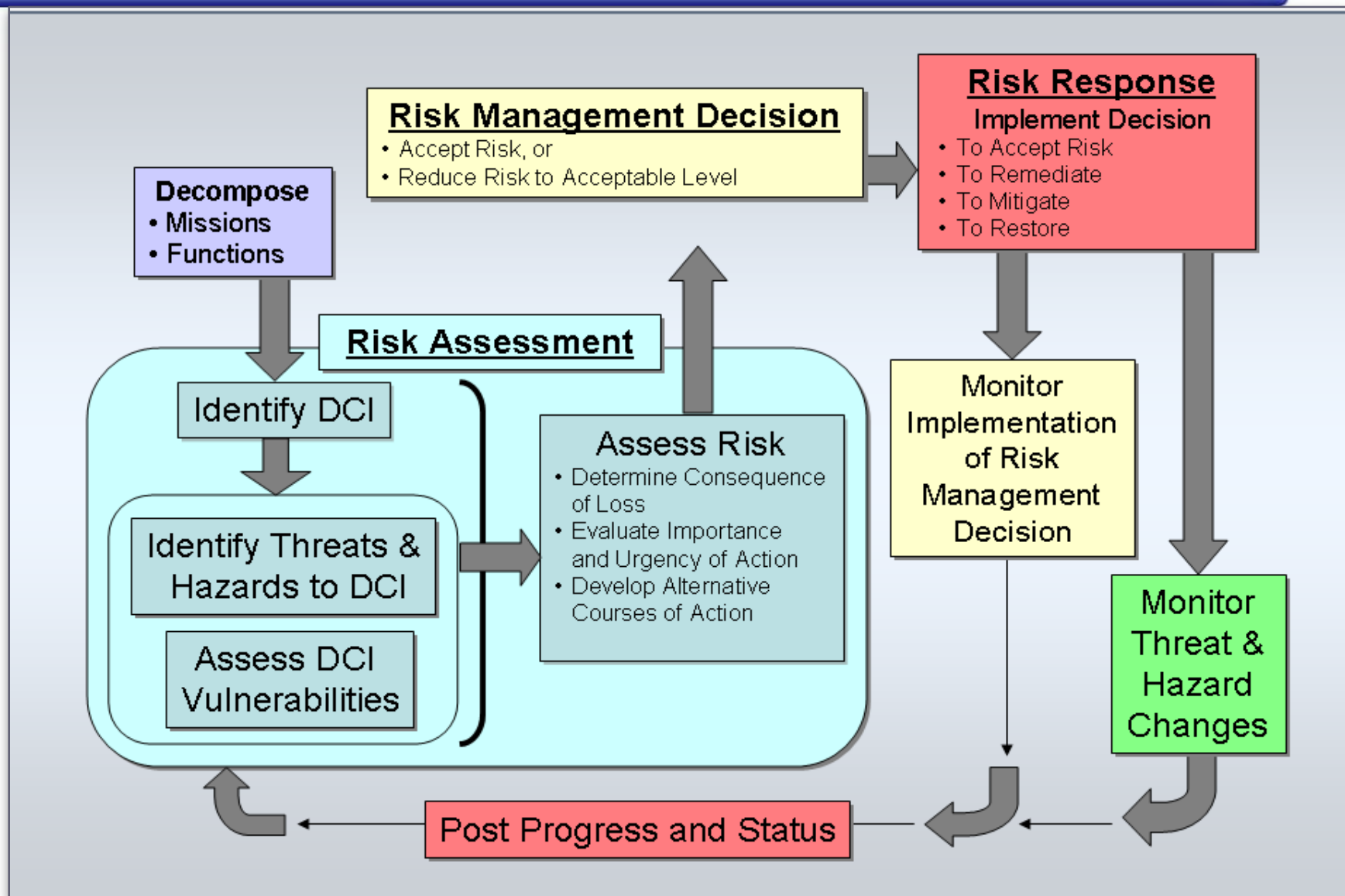


# *Applying CIP to the Transportation Mission*





# *The DCIP Risk Management Process*



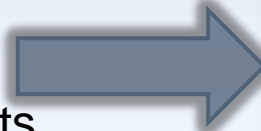




# *Applying CIP to the Transportation Mission (Cont)*

- Mission Decomposition to **Identify DCI**
  - ☐ Deploy, Redeploy, Sustain, Patient Movement, Command and Control, and Intelligence
  - ☐ Identify Standards, conditions and capabilities required for specific Transportation Missions and Functions

- Identification/Analysis of DCI
  - ☐ DOD military installations
  - ☐ Commercial seaports/airports
  - ☐ Commercial rail lines/yards
  - ☐ State/local roadways
  - ☐ Waterways



## **TAKEAWAY:**

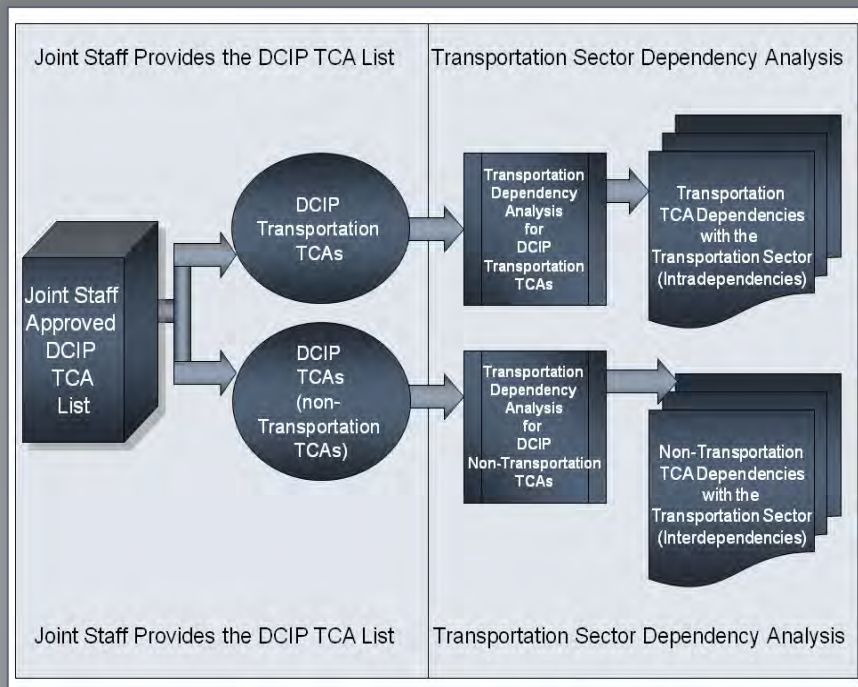
**DOD, Federal, Public, and  
Private industry owned  
and/or operated  
infrastructure focus**

- Identification of Threats and Hazards to DCI
- Identification of Vulnerabilities to DCI
- Identification of Dependencies to DCI
- Risk Management Decision for DCI
- Monitoring/Reporting Status of DCI





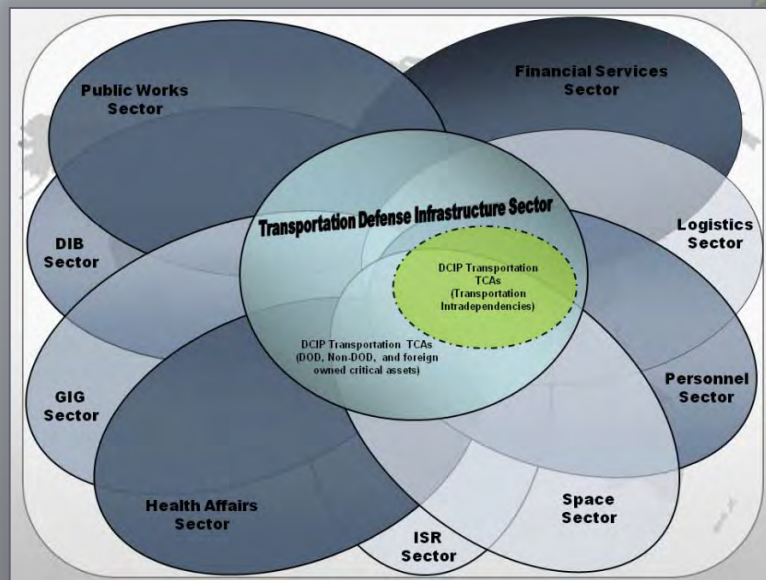
# Identification of Dependencies to DCI



## ✓ Dependency analysis of TCAs

- ☐ Electricity
- ☐ Fuel
- ☐ Bridges
- ☐ Waterways
- ☐ Etc

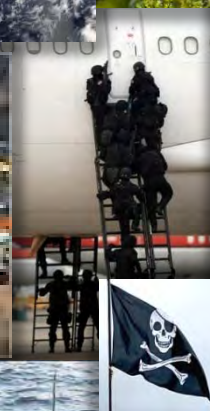
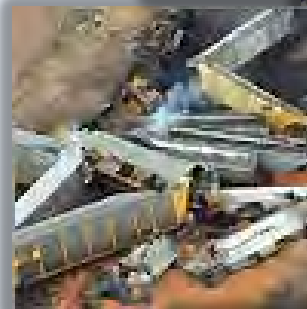
- ✓ Joint Staff issues the DCIP TCA list
- ✓ Transportation Sector responsibility





# *Identification of Threats and Hazards to DCI*

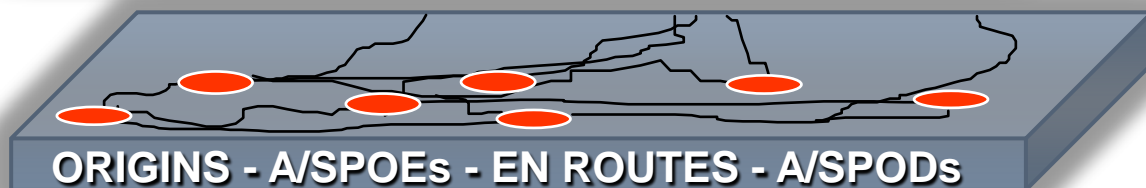
- All hazards approach (natural and manmade)
- Defense Intelligence Agency, TCJ2, Federal Bureau of Investigation, Department of Homeland Security, State/local police, etc
- Combatant Commands, Military Services, and Intelligence offices
- Enhanced Threats and Hazards Assessment







# Identification of Vulnerabilities to DCI



\* **VULNERABILITY** ... could cause it to suffer a degradation or loss (incapacity to perform its designated function) as a result of having been subjected to a certain level of threat or hazard.

\*DODD 3020.40

## Current Program

- ☐ Provide **Transportation Infrastructure Subject Matter Expertise** for DCIP Assessments with a Transportation mission focus
- ☐ Exploring **partnership opportunities** with other government agencies (DHS, TSA, USCG, etc.) at non-DOD owned locations:
  - ✓ Commercial Seaports
  - ✓ Commercial Airports
  - ✓ Interstate Highway Network
  - ✓ Rail Network



# *The DCIP Risk Management Decision*

- **Accept the risk**
- **Remediate the risk**
- **Mitigate the risk**
- **Reconstitute the asset**



**Reduce risk to  
an acceptable  
level from  
threat,  
hazard,  
or  
vulnerability**

**DCIP GOAL:** **Reduce or eliminate** unacceptable **risk** to DCAs, thus enabling the successful execution of DOD missions, regardless of the threat or hazard





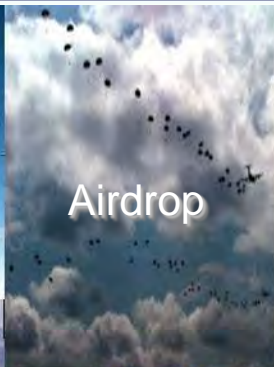


# Questions...

Tanker Air Bridge



Airdrop



Force Rotations



Aeromedical Evacuation



Operational Support Airlift



Prepositioning Ships



Sustainment



Port Operations



Humanitarian Movement



Presidential Airlift



Redeployment



Deployment



*Global Requirements*



*...Our Focus is to Support the Warfighter*

# **Corporate Contingency Planning**

Theory and Practice

April 2010

Ed Halibozek

Vice President of Corporate Security



# The Company - Five Operating Sectors



## Aerospace Systems



**Large Scale Systems  
Integration**

**C<sup>4</sup>ISR**

**Unmanned Systems**

**Airborne Ground  
Surveillance / C2**

**Naval BMC2**

**Global / Theater Strike  
Systems**

**Electronic Combat  
Operations**

**ISR Satellite Systems**

**Missile Defense Satellite  
Systems**

**MILSATCOM Systems**

**Environmental & Space  
Science Satellite Systems**

**Directed Energy Systems**

**Strategic Space Systems**

## Electronic Systems



**Radar Systems**

**C<sup>4</sup>ISR**

**Electronic Warfare**

**Naval & Marine Systems**

**Navigation & Guidance**

**Military Space**

**Government Systems**

## Information Systems



**Command & Control  
Systems**

**Network Communications**

**Intelligence, Surveillance &  
Reconnaissance Systems**

**Enterprise Systems  
and Security**

**IT/Network Outsourcing**

**Intelligence**

**Federal, State/Local  
& Commercial**

**Homeland Security  
& Health**

## Shipbuilding



**Naval Systems Integrator**

**Surface Combatants**

**Expeditionary  
Warfare Ships**

**Auxiliary Ships**

**Marine Composite  
Technology**

**Coast Guard Cutters**

**Commercial Ships**

**Nuclear Aircraft Carriers**

**Nuclear Submarines**

**Fleet Maintenance**

**Aircraft Carrier  
Overhaul & Refueling**

## Technical Services



**Systems Support**

**Base and Infrastructure  
Support**

**Range Operations**

**Maintenance Support**

**Training and Simulations**

**Technical and  
Operational Support**

**Live, Virtual and  
Constructive Domains**

**Life Cycle Optimization**

**Performance Based  
Logistics**

**Modifications, Repair  
and Overhaul (MRO)**

**Supply Chain Management**

**Lead Support  
Integrator (LSI)**

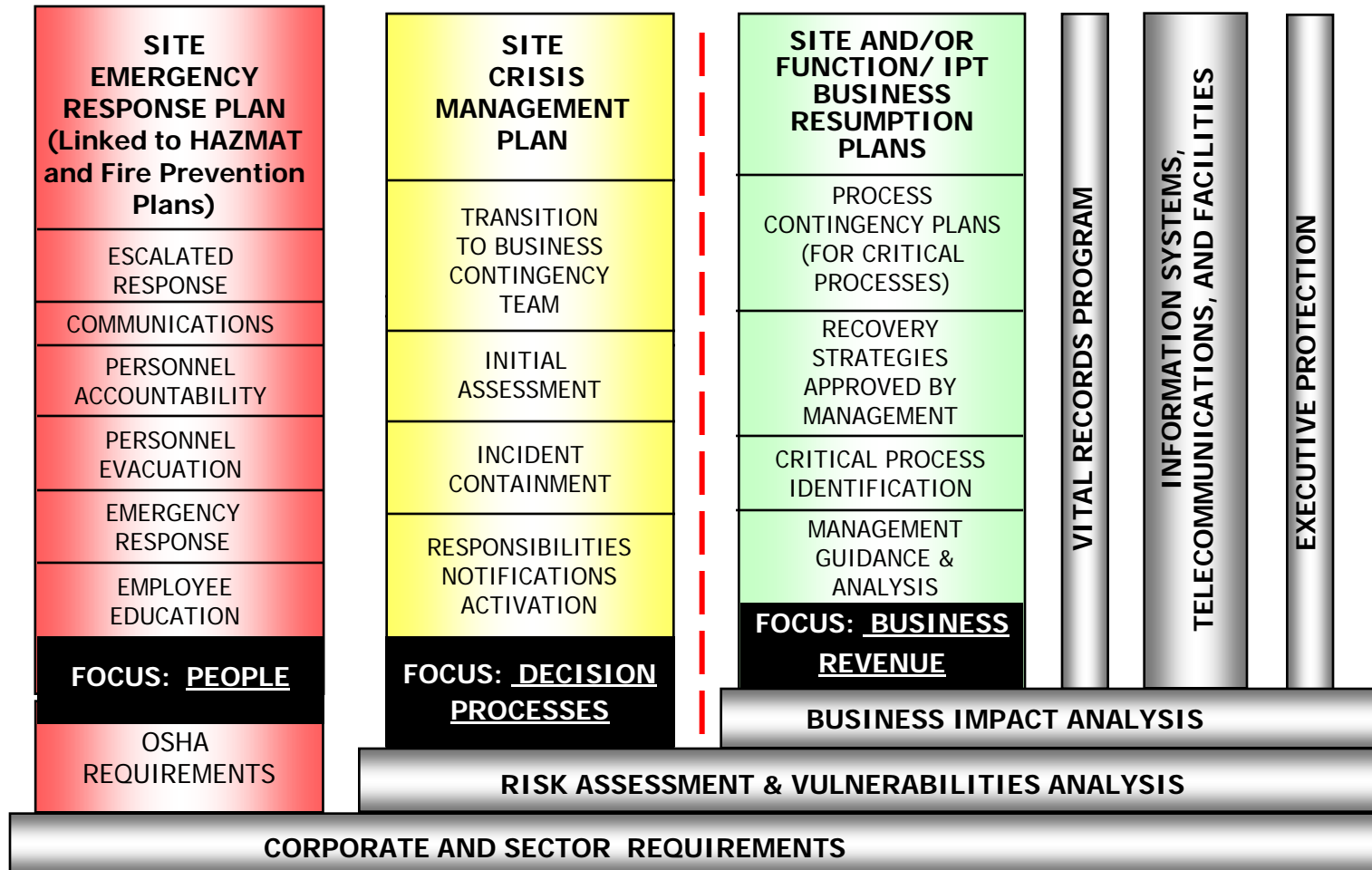
- Five Varied Product Operations but a Consolidated Security Focus
- Corporate Policy J1 “Security” – Seven Major Processes
  - Personnel Security
  - Information Security
  - Physical Security
  - Investigations
  - Fire Protection
  - **Contingency Planning**
  - Security Quality and Oversight
- This is the Common Charter for Security Activity in Every Sector
- Corporate Security Functions Under Enterprise Shared Services. Was Under HR Until Recently; Remains Under HR at Sectors

## The Charter

- Corporate Procedure – “Business Continuity Program”
  - Sub-Procedure – “Definitions” Ensures Common Terminology
  - Sub-Procedure – “Business Continuity Program Guidelines” Provides Planning Outlines and Defines Required Content
- Corporate Procedures are Supplemented and Tailored by Sectors to Address Unique Business Aspects and Issues... BUT
- A Standard Business Continuity Program (BCP) Paradigm Applies at All Company Elements

- Crisis: “Any unplanned event or situation, including human-caused events and natural disasters, which threatens, or has the potential, to adversely affect the business area/site as a whole in terms of its existence, reputation, values and beliefs, systems, finances, physical plant, or the medical, environmental, and emotional well being of persons within and around the facility.”
- Crisis Management: “A top-down, coordinated approach to provide leadership, decide policy, and direct actions to prepare for, prevent, and respond to incidents that escalate beyond the business area/site’s normal response capability.”
- Critical Process: “Business processes which, if significantly disrupted, would have an adverse impact on the company’s personnel, operations, revenue, customer schedules, contractual commitments, or legal obligations.”

# Corporate Contingency Planning



- The Wide Variety of Potential Emergencies and Business Crises

Types:	<u>Natural</u>	<u>Human</u>	<u>Technical</u>	(Not All-Inclusive)
	Medical emergency		Fire (internal and external)	
	Bomb threat		Power interruption	
	High winds (radar range)		Flood	
	Hurricane		Snow storm/Blizzard	
	HAZMAT spill		Aircraft crash	
	Civil disorder		Earthquake	
	Terrorist threat/Attacks		Workplace violence	
	Explosion		Tornado	
	Law Enforcement actions (raids)		Product quality defect allegations	
	Product sabotage		Network penetration/exfiltration	
	Denial of Service cyber attacks		Insider threat	
	Intellectual property loss		Pandemic	

Scale and Impact Define Problem & Response



- Enterprise BCP Requires Three Plans be Established, Implemented, Tested and Updated at Least Annually at Every Facility:
    - Emergency Action Plan (EAP)\* – What employees are to do in an emergency (Evacuation, Accountability, Recovery, Communication)
    - Crisis Management Plan (CMP)\* – How management structures and reacts to deal with any of the multiple types of major or more enduring crises that can occur (CM Team is Defined and Roles Established; CM Room Established; Equipment Pre-Positioned; Checklists Developed for Various Types of Crisis)
    - Business Resumption Plan (BRP)\*\* – How senior management returns things to normal (BR Team Defined and Roles Established; Tasks and Checklists Pre-Determined)
- \* Security has management responsibility
- \*\* Senior business executive has responsibility to restore business activity

## Required Planning

- Priority is on Rapid Disaster Recovery – Physical and Cyber
  - Emergency Response: Survive and Terminate
    - React to the issue
    - Care for the people
    - Restore reasonable normalcy ASAP
  - Crisis Management: Evaluate the New Reality
    - Marshal your resources according to plan
    - Gather data and evaluate the situation
    - Organize to address changed conditions
    - Mitigate collateral fallout
  - Business Resumption:
    - Evaluate losses and quantify restoration needs
    - Tailor the plan from general to specific, test and refine it
    - Execute the plan; get back to business

## Priorities

- Heavy Focus on IT Security and Systems Recovery
  - All Info Systems are Subject to Business Impact Analysis (BIA) – “A documented product that assesses the value and impact of loss or delay in execution of the *critical system(s)* identified by functions.”
  - Critical Systems, Determined by BIA, Require an Information System Continuity Plan (ISCP) – “Sets forth the planning actions, procedures, and responsibilities necessary for the short- and long-term restoration of information systems supporting critical business operations.”
  - Test Plans are Required and Exercised for Each ISCP
  - Risk, in Lieu of ISCP, May be Accepted by Users for Less Critical Systems – But Users Must Document Their Justification for Risk Acceptance

Businesses Cannot Function Without IT

- Pandemic Preparedness – A Planning Case Study
  - Early 2006 – Corporate cadre began outlining a plan to address a potential Bird Flu (H5N1) pandemic, to address and mitigate business impacts
  - Earlier SARS concerns, and the predicted inevitability of human-to-human H5N1 infection at some point, dictated the wisdom of advance planning
  - Worldwide situation is already in Phase 3, per United Nations definition
- Pandemic Sub-Team Formed Under Hq Crisis Management Team:
  - Corporate Functions Participating: Environmental, Health & Safety, HR, Security (Chair), Travel, Law, Risk Management, Finance, Benefits, Corporate Communications, Global Supply Chain
  - Team decided advance executive planning was needed to address:
    - Medical/medication practices; Pay policy; Travel restrictions; Evacuation policies; Alternate work locations; Remote access capabilities; Alternate workforce; Quarantine & isolation policy; Allowable & mandatory time off; Return to work process; Coverage for local government lapses

## Specific Proactive Planning

- Pandemic Preparedness – A Planning Case Study (continued)
  - Key communications: Employee awareness – potential threat; general prevention measures; preventive measures to take during Phases 4 – 6
  - Identify essential employees and essential suppliers
- Planning Approach – Outline Company Actions Progressively from Phase 3 (current) Through to Full Phase 6 Pandemic
  - Basic Corporate Plan published in May 2006 with functional enclosures outlining specific tasks, by phase
  - Plan supplements were required from all business sectors
  - We continue to monitor Bird Flu status worldwide
- 2009 Swine Flu (H1N1) Experience Has Refined the Planning Model
  - Relative virulence of a strain is recognized as a more significant factor than simple widespread prevalence, even at Phase 6

## Specific Proactive Planning

# Corporate Contingency Planning

- The Ultimate Crisis – Hurricane Katrina – A Case Study



- Eight Company Locations Were Impacted in 2005
- Corporate and Cross-Functional Multi-Sector CMTs Acted
  - Assessed Needs and Coordinated Efforts to Deliver Essential Provisions:
    - Food, ice, water, fuel, vehicles, trailers, generators, forklifts, communication capabilities, payroll, physical security.



- Katrina Recovery
- Business Resilience Benefited from Having the BCP Structure in Place, from Advance Planning and applying a Flexible Focus
  - Swift and efficient action prevented worse business disruption and expedited the return to normal.
  - Within three weeks, power was restored at Ship System facilities and over 10,000 employees were back to work.
    - Remember, Katrina had impacted employee homes, families and lives.
  - Within five weeks, 12,500 employees back to work.
  - Resilience = Rapid Recovery: Benefits both customers and the company.
- Lessons Learned Were Documented – Information Shared
  - Corporate CMT began compiling experience data within 30 days of event.
  - Document shared with CMTs company-wide within 60 days after the event.

- A BCP Strategy of Partnering with Neighbors Builds Relationships
- Relationships Establish Trust and Pay Dividends
- Example:
  - NGC Corporate Hq Security partnered to develop the Century City Mutual Aid Structure
    - Focus on earthquake, fire, terrorism, civil disorder, crime
  - Worked with Los Angeles PD, Sheriff, Fire, and other Century City businesses, large and small
  - NGC hosted meetings (donuts can draw participation and make friends)
  - Helped draft and coordinate planning documentation
  - Crisis Management Teams and Control Center locations pre-planned
  - Participants and roles defined; contact lists developed

- The Future Focus – Prepare for and Prevent Major Cyber Crisis
  - Current mitigating actions
    - Consolidate corporate data centers (4) – Better control and organization
    - Decentralize locations – Spread the risk around the compass
  - Cyber Security Operations Center – A Benchmark Operation
    - 24/7/365 security monitoring of networks, servers and desktops
    - Computer security incident response and investigations provides containment, analysis and restoration
    - Digital forensics expertise
  - Cyber Threat Analysis and Intelligence Team (CTA&I)
    - Expertise: East Asia/China military intelligence, information warfare, advanced hacking, malicious systems and software, network security
    - Mission: Identify and stop the Advanced Persistent Threat (APT)

# QUESTIONS?

***NORTHROP GRUMMAN***



# Training and Exercises

**Homeland Security Exercise and Evaluation Program**

<http://www.hseep.dhs.gov>

**FEMA Lessons Learned Information Sharing**

<http://www.llis.gov>

**FEMA Emergency Management Institute**

<http://training.fema.gov/IS/crslist.asp>

**Business**

<http://www.dhs.gov/xbsnss/>

**Critical Infrastructure Protection**

<http://www.dhs.gov/files/programs/critical.shtm>





# Homeland Threat Overview

28 April 2010



Homeland  
Security

Department of Homeland Security  
Office of Intelligence and Analysis



Homeland  
Security

# Al-Qa'ida and Affiliates—Homeland Plotting

## ▪ Al-Qa'ida, its affiliates and allies, remain dangerous and adaptive enemies:

- We lack insights into specific details, timing and intended targets but assess al-Qa'ida continues to pursue plans for Homeland attacks
- Historically AQ focused on prominent political, economic and infrastructure targets to produce mass casualties, visually dramatic destruction, significant economic aftershocks and fear among the population
- However, recent events suggest possible trend in which terrorists seek to conduct small, easy attacks



Usama Bin Laden in recent AQ video

Sources: 2007 National Intelligence Estimate: Terrorist Threat to the Homeland  
DNI Annual Threat Assessment-February 2009

# Media Statements Highlight Call for Action

- March 17 statement by Yemen-based Anwar al-Aulaqi continues recent calls for attacks upon civilians and infrastructure within the United States by extremist ideologues.<sup>1</sup>
- On March 7, al-Qa'ida media spokesman Adam Gadahn called for additional attacks similar to those executed and attempted by Ft. Hood suspect Maj. Nidal Hasan and accused Christmas Day bomber Umar Farouk Abdulmutallab
  - “...unsuccessful attacks on Western mass transportation systems can bring major cities to a halt, cost the enemy billions and send... corporations into bankruptcy.”<sup>2</sup>
- In January Usama bin Ladin repeated his criticism of the U.S. and its policies in a video statement,
  - He instructed individuals within the U.S. to hold large corporations and politicians accountable for economic downturn.<sup>3</sup>

<sup>1</sup> <http://www.foxnews.com/politics/2010/03/18/raw-data-partial-transcript-radical-clerics-tape/>

<sup>2</sup> NEFA Foundation, <http://www.nefafoundation.org>

<sup>3</sup> NEFA Foundation, <http://www.nefafoundation.org/miscellaneous/UBL0110.pdf>

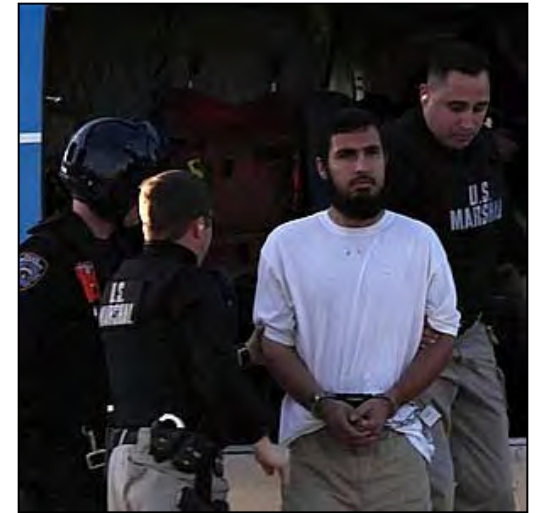
# Homeland Threat Environment

- **Recent attacks, arrests and plot disruptions indicate a continued violent extremist threat to the Homeland.**
  - Arrests of US-based al-Qa'ida associates last year suggest the organization has succeeded in positioning Homeland-focused operatives in the U.S.
  - Ties that the Christmas Day attacker had to AQ affiliate al-Qa'ida in the Arabian Peninsula represent new Homeland threat concerns
  - Somali-Americans continue to show interest in returning to East Africa to participate in the ongoing conflict in Somalia
  - Separately, U.S.-based violent extremists with no overseas connections generally have the intent to conduct an attack but lack capabilities of those connected to terrorists overseas.

# Important Arrests in the US

- Arrests of Zazi and his associates indicate overseas terrorist groups had operatives in the U.S. capable of facilitating and carrying out attacks.

- Zazi was allegedly in direct operational contact with an al-Qa'ida associate in Pakistan and plotting against targets in the U.S.
- Zazi allegedly planned attacks against the NYC subway system<sup>1</sup>
- Zazi and co-conspirators Adis Medunjanin and Zarein Ahmedzay received training in Pakistan to include the use of explosives<sup>2</sup>



***Najibullah Zazi allegedly planned to attack targets in the US with explosives.***

<sup>1</sup> Department of Justice, Office of Public Affairs, Monday, February 22, 2010 Najibullah Zazi Pleads Guilty to Conspiracy to Use Explosives Against Persons or Property in U.S., Conspiracy to Murder Abroad and Providing Material Support to Al-Qaeda

<sup>2</sup> Department of Justice Office of Public Affairs, Thursday, February 25, 2010 Two Charged with Terror Violations in Connection with New York Subway Plot

# Important Arrests in the U.S.

- **Chicago man was arrested and charged with allegedly planning attacks against Denmark and India**
  - Charges against David Headley, who pleaded guilty last week, stem from his support to the Mumbai attacks, including facilitation of pre-attack planning and surveillance.
  - Headley charges included conducting surveillance of newspaper offices in Denmark in support of possible terrorist attacks there.
  - Charges highlight the al-Qa'ida links to the planned attack in Denmark and explain the significant involvement of Ilyas Kashmiri, a prominent Pakistan-based terrorist with ties to al-Qa'ida<sup>1</sup>



***Tahawwur Rana<sup>USPER</sup>, an alleged co-conspirator in plotting overseas attacks.***



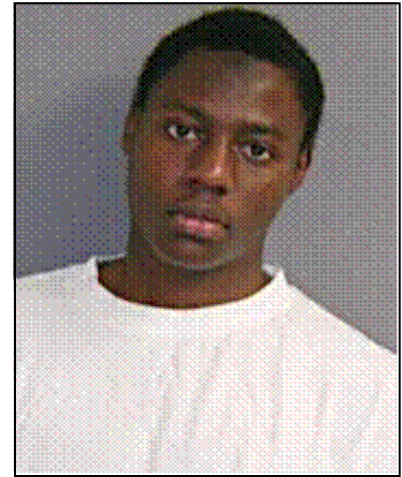
***Ilyas Kashmiri allegedly plotted with a Chicago man against overseas targets.***

<sup>1</sup> DOJ Press Release and Indictment dated Thursday, March 18, 2010 **CHICAGO RESIDENT DAVID COLEMAN HEADLEY PLEADS GUILTY TO ROLE IN INDIA AND DENMARK TERRORISM CONSPIRACIES** Admits Conducting Surveillance for Lashkar e Tayyiba in Planning 2008 Mumbai Attacks Indictment



# Dec. 25, 2009, Attempted Aviation Attack

- Al-Qa'ida regional affiliate AQAP, which has advocated attacks on the U.S. Homeland in the past, directed Umar Farouk Abdulmutallab and provided him training and explosives.<sup>1</sup>
- Lessons learned are still emerging; however, initial observations:
  - Compressed planning cycle<sup>2</sup>
  - Artful concealment<sup>3</sup>
- We are still exploring what other Homeland plots AQAP and associated Yemeni extremists may have planned. We are concerned that they will continue to try to do so.<sup>1</sup>



Umar Farouk Abdulmutallab

<sup>1</sup> Annual Threat Assessment of the US Intelligence Community for the Senate Select Committee on Intelligence

<sup>2</sup> February 2010

<sup>2</sup> LA Times, Al Qaeda's New Tactic is to Seize Shortcuts

<sup>3</sup> DHS-FBI Joint Roll Call Release, 29 December 2009

# Somali Diaspora Support to al-Shabaab

- We judge most Al-Shabaab and East Africa-based al-Qa'ida members will remain focused on regional objectives in the near-term.
- East Africa-based al-Qa'ida leaders or al-Shabaab may elect to redirect to the Homeland some of the Westerners, including North Americans, now training and fighting in Somalia.
- Somali-Americans playing larger role in conflict; individuals leading attacks and conducting suicide bombings.<sup>1</sup>
- An American from Houston was charged with receiving terrorist training from al-Qa'ida; others from Minneapolis have also been charged with similar counts.<sup>2</sup>



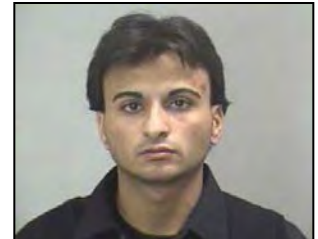
<sup>1</sup> Annual Threat Assessment of the US Intelligence Community for the Senate Select Committee on Intelligence 2 February 2010

<sup>2</sup> Department of Justice Press Release For Immediate Release November 23, 2009 United States Attorney's Office District of Minnesota Terror Charges Unsealed in Minnesota Against Eight Defendants, Justice Department Announces

# Autonomous Violent Extremists

- Arrests last summer illustrate the threat posed by U.S.-based extremists
- These individuals are more reliant on additional participants
  - Hosam Smadi in Texas, Michael Curtiss Finton in Illinois and James Cromitie in New York asked law enforcement informants to obtain weapons and explosives
  - Tarek Mehanna considered attacking malls a few years ago but claimed he was unable to do so because he could not gain access to automatic weapons

*Hosman  
Smadi*



*Michael  
Curtiss  
Finton*



*James  
Cromitie*



*Tarek Mehanna*

**Implications:** These individuals identified with the ideas and goals of the global jihadist movement, but lacked direct guidance or instructions from the leadership of a formal terrorist network. Despite this, they attempted to advance plots by conducting training, selecting targets, and procuring weapons.

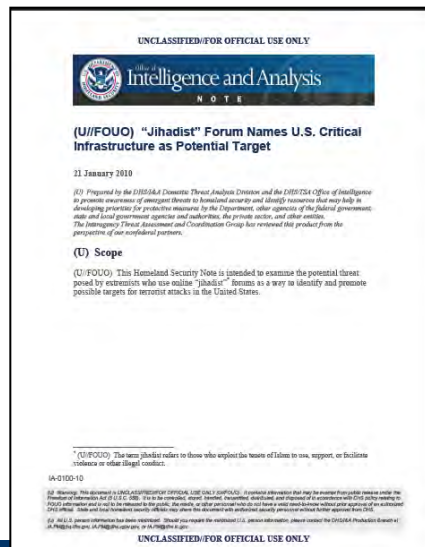
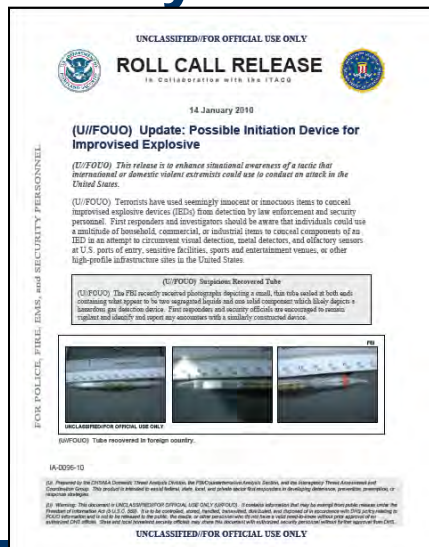
Congressional Testimony, Robert S. Mueller, III, Director Federal Bureau of Investigation  
Before the Senate Committee on the Judiciary January 20, 2010

# Overseas Activities Provide Valuable Insight

- **Adversaries' actions overseas foreshadow possible terrorist tactics in the homeland**
- **Similar overseas experiences and the Internet provide common training opportunities and attack methods**
- **Intelligence information, web forums, disrupted operations and attacks provide insight into preferred terrorist targets**
- **Lessons learned from overseas attacks offer security officials in the U.S. insight and perspective for securing similar Homeland facilities**

# DHS I&A Products

- Roll call releases provide general threat indicators for law enforcement
- Homeland Security Notes provide more specific information based on active threat or activities overseas
- Homeland Security Assessments provide greater analysis of terrorist tactics and targets





# Conclusion

- Al-Qa'ida remains the most adaptive and lethal foe but other groups such as AQAP have demonstrated their effectiveness.
  - Targets will be selected for maximum casualties; however, small, easy attacks will increasingly be employed because of the perceived success rate
- We are concerned that the influence of inspirational figures such as Anwar al-Aulaqi will increasingly motivate homegrown individuals toward violent extremism.
  - Of particular concern are individuals who travel abroad for training and return to attack the Homeland.
  - Individuals motivated by a combination of personal circumstances and external factors, such as grievances over foreign policy, negative ideologues, feelings of alienation, ties to a global pan-Islamic identity, and the availability of extremist propaganda through the Internet and other mass media
- The Intelligence Community judges that a handful of individuals and small, discrete cells will likely seek to mount attacks each year, with only a small portion of that activity materializing into violence against the Homeland.





***2010 DIB CIP***

## ***Philadelphia Police Department***



***Captain Walt Smith, Commanding Officer  
Homeland Security Unit***



# *Philadelphia Police Department*

## *Counter Terrorism Bureau*

### *Mission*

**The Philadelphia Police Department's Homeland Security Unit was established in the spring of 2002 as a proactive response to the elevated threat of terrorism following the attacks of September 11, 2001. Prevent and Respond to potential Terrorism Related and All Hazard incidents.**

**Although, terrorism prevention was not a new concept for law enforcement, the events of September 11, 2001 emphasized the need for law enforcement to be both first responders & first preventers in the war on terrorism.**

**Homeland Security Unit**

**Counter Terrorism Operations**

**Dignitary Protection/Hostage Negotiations/Investigations**

**Federal Bureau of Investigation Joint Terrorism Task Force (JTTF)**

# Homeland Security Unit's Investigations

- All terrorism related information as well as acts of terrorism or potential terrorism related incidents are fully investigated by experienced Homeland Security Unit investigators.
- These investigators work in unison with the Homeland Security Unit Investigators assigned directly to the Federal Bureau of Investigation Joint Terrorism Task Force (FBI JTTF).
- This collaboration provides both a local and global perspectives on terrorism response and prevention

## Community/Business Support

- Created dedicated Intelligence Center for Counter Terrorism/Crime Prevention and all hazard mitigation supporting the Emergency Operations Center
- Terrorism Prevention Hotline (215) 685-1170
- Website Tip Line [www.ppdonline.org](http://www.ppdonline.org)

*DELAWARE VALLEY  
INTELLIGENCE CENTER  
(DVIC)*

*FUSION CENTER*



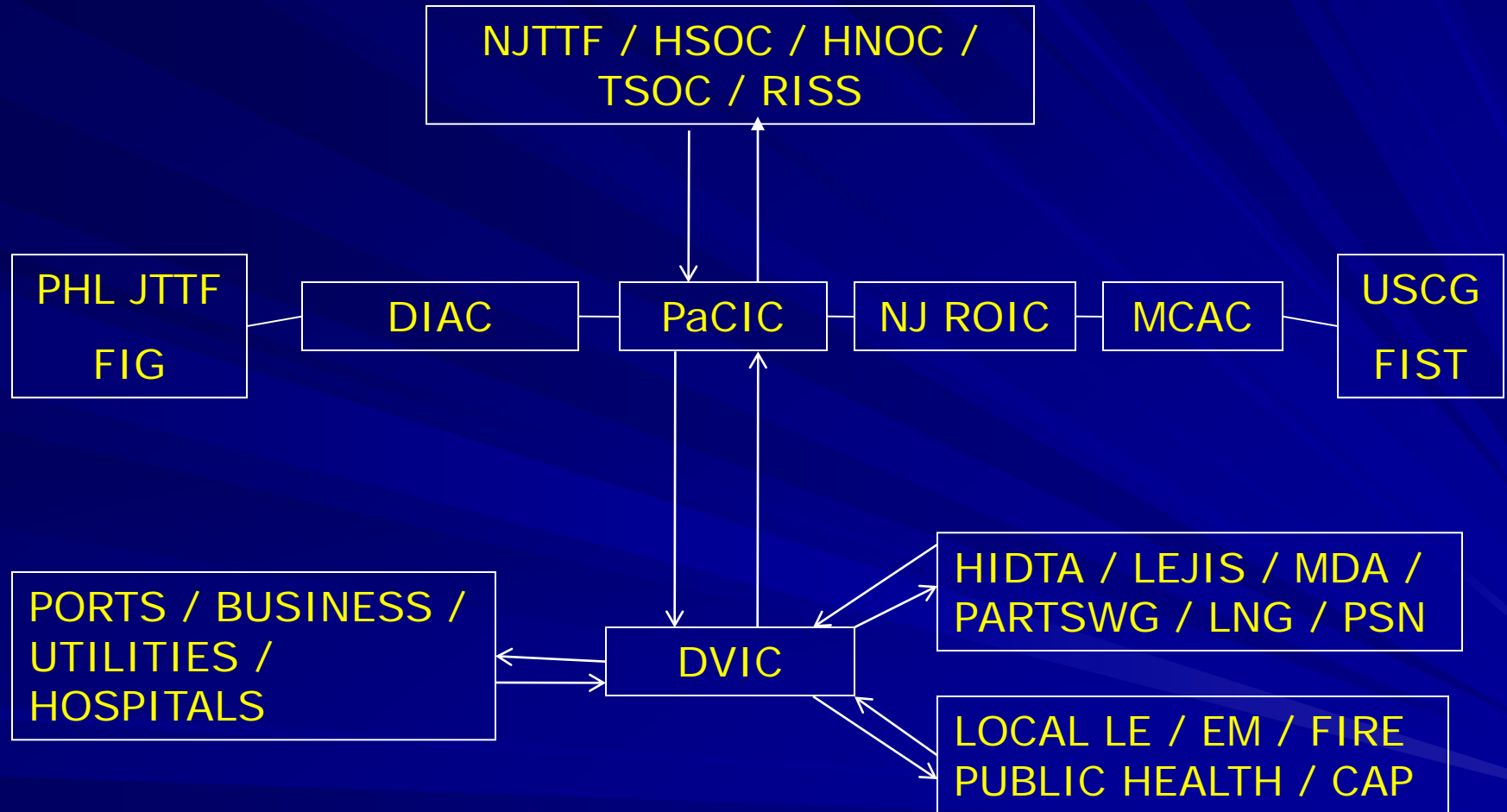
# *Fusion Partners*

## A Four State, Twelve County Initiative

- Agriculture
- Banking and Finance
- Chemical Industry
- Community Groups
- Criminal Justice
- Education
- Emergency Services
- Energy
- Government
- Health & Related Services
- Hospitality & Lodging
- Information & Telecommunication
- Military
- Armament Research Development & Engineering Picatinny Arsenal
- Multi Agency Collaborative Environment ,Herdon, VA
- Counter Drug Program, Fort Indiantown Gap, US Army Reserve
- Civil Support Team
- Emergency Preparedness Liaison Officers (PPLO) McGuire AFB Willow Grove Naval Air Station
- Port Facilities
- Postal & Shipping
- Private Security
- Public Works
- Real Estate
- Retail
- Social Services
- Transportation



# *Fusion Structure*



# Homeland Security Unit's Training

- The Homeland Security Unit provides intensive response and prevention training to the Department's First Responders, who will be the first to arrive on the scene of a major disaster.
- To enhance officer safety, training programs include proper Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) techniques, tactics and procedures as well as providing officers with indicators of potential terrorist related activity.
- All Homeland Security Unit training programs support the national response strategy and include Incident Command Systems (ICS), and are in compliance with the National Incident Management Systems (NIMS) and the National Response Framework.

# Homeland Security Unit's Major Incident Response Team (MIRT)

- The Major Incident Response Team is the Police Department's first line of defense in a major disaster or terrorist related event.
- These officers receive specialized training from managing a radiological incident to a natural disaster and are provided with the necessary protective equipment to be effective in major incident management.
- In addition, the Major Incident Response Team meets the department's short term tactical objectives by providing a specially trained rapid response team, while meeting the department's long term strategic goals of providing a regional response capability that could be deployed throughout Southeastern Pennsylvania.

# Major Incident Response Team

- 500 volunteer officers and supervisors
- Officers receive specialized training in all hazard response, including Weapons of Mass Destruction (WMD)
- Managing Chemical and Biological Incidents
- Decontamination procedures and perimeter security
- Identification of suspects and witnesses
- Primary mission is to secure the warm zone
- Not a special unit ( But **Special** to us)





# Philadelphia Police MIRT Equipment-

## Level "C" Protection

- MSA Millennium APR with NIOSH approved CBRNE Canister and Voice Amplifier
- TYVEK-F Coverall
- Butyl Protective Hood
- Nitrile Gloves and Chemical Resistant Over-Boots
- All Secured with Kappler CHEM-TAPE
- Duty Belt w/sidearm, OC Spray, Handcuffs and Radio

# PRIMARY MISSION

## Stabilize Conditions

- ✓ Secure perimeter as needed
- ✓ Secure the warm zone
- ✓ Establish order in zone
- ✓ Identify witnesses and suspects



# MIRT PRIMARY MISSION

## Stabilize Conditions



# ADDITIONAL FUNCTIONS

- ✓ Assist / contain injured
- ✓ Identify evidence
- ✓ Identify secondary devices
- ✓ Maintain team integrity
- ✓ Decon prior to leaving warm zone

# Homeland Security Unit's Critical Infrastructure Protection Programs

- The Philadelphia Police Department's Homeland Security Unit works collaboratively with the U.S. Department of Homeland Security Protective Security Advisors and the Private Sector in developing proactive protective strategies to ensure target hardening of critical infrastructure and critical resources.
- These programs are designed to enhance security while limiting the potential loss of critical services, therefore increasing resiliency.
- Programs include Buffer Zone Protection Plans
- Threat and Risk Assessments
- Site Assessment Visits



# Buffer Zone Protection Plans and Vulnerability Assessments



PGW PORT RICHMOND PLANT



Security Recommendation— 1 P/O per tour – Roving Patrol to ensure no vehicles park or stop along or near PGW Plant fence line

# Homeland Security Unit's Equipment

- The Homeland Security unit maintains a compilation of specialized equipment to support the overall mission of terrorism response and prevention, such as a state of the art command and control center.
- In addition, the Homeland Security Unit participates in the research and development of merging technologies to be able to provide the best possible tools to our first responders.





PHILADELPHIA POLICE

HOMELAND SECURITY UNIT

DIAL  
911

PHILADELPHIA  
POLICE  
HOMELAND SECURITY UNIT

RV5

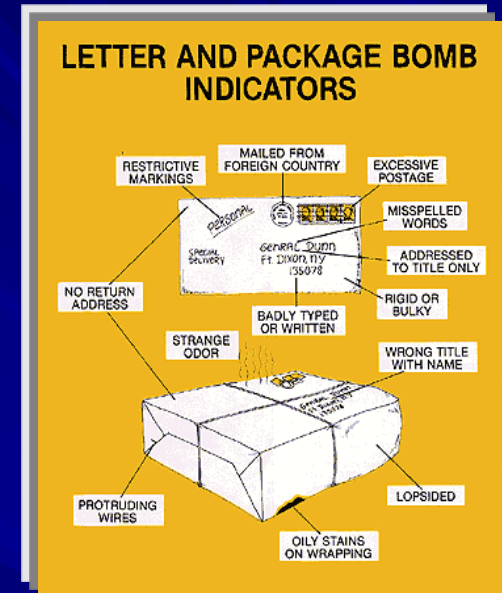
## Homeland Security Unit's Community/Business Outreach Programs

- It is paramount that the Philadelphia Police Department recognizes the Community/Private Sector as first preventers in the role of crime and terrorism prevention and that both Law Enforcement and the community work in unison to enhance awareness and reduce complacency.
- Members of the Homeland Security Unit provide preparedness and prevention training in order to be more efficient and effective in enhancing the safety and security of our communities.
- Topics of training include terrorism awareness and indicators, workplace security, bomb threat procedures, suspicious mailings, recognizing explosives and proper procedures for handling packages containing an unknown substance and Active Shooter. All training is tailored to meet specific needs or organizational requirements.

# Outreach

## Programs:

- Bomb Threat Plans
- Suspicious Mailing Procedures
- Target Hardening
- Community Groups:
  - Community Awareness Terrorism Training (CAT EYES)
  - Terrorism Awareness Training (TAP)  
Designed to create community awareness and report suspicious or unusual behavior



# Homeland Security Unit's Terrorism Leads and Tips Line

- It is critical that the community be provided with a mechanism to report potential terrorism related activity.
- Successful terrorism prevention strategies include disrupting terrorist activity in the planning stages.
- Members of the community are the first to recognize unusual occurrences within their communities that may be indicators of potential terrorist related activity.
- To support the community efforts in reporting suspicious activity, each of the Twenty-Three (23) Patrol Districts throughout the city are staffed with a Terrorism Liaison Officer (TLO).
- In addition, the Homeland Security Unit maintains a Terrorism Leads and Tips line #215-685-1170. As always in an emergency call 911.



# Homeland Security Unit's Agency Coordination

- The Philadelphia Police Department's Homeland Security Unit recognizes the importance of developing true partnerships at the Federal, State and Local levels.
- It is critical that emergency responders meet and develop strong relationships prior to meeting the first time at an emergent event.
- It is also imperative that these agencies train and exercise joint and individual capabilities utilizing table top exercises, computer simulations as well as full scale training exercises.
- To that end the Homeland Security Unit supports all Federal, State and Local initiatives in the development of best practices in the role of terrorism response and prevention.



## AGENCY COORDINATION:

### US Attorney's Anti Terror Task Force :

- All Federal, State & local law enforcement agencies represented
- Coordinate the dissemination of information and the development of investigative and prosecutorial strategies throughout the country
- Coordinates training exercises for multi-jurisdictional scenarios

## AGENCY COORDINATION:

### Southeast Pennsylvania Regional Counter Terrorism Task Force :

- All 5 Counties (Bucks, Chester, Delaware, Montgomery, and Philadelphia) First Responders
- Coordinate the dissemination of Federal Homeland Security Grants and other funding
- Serve as a standing organizational structure for a coordinated response to a terrorist incident in this area.

# Intra-Agency Cooperation

City of Philadelphia Working Group:  
Emergency Management -  
Police, Fire, and Health Departments





# *Philadelphia Police Department*

## *Public / Private Partnerships*

- **Recognize the critical value of working with the private sector.**
- **Center City District - business improvement districts - public / private partnerships - sharing crime data, safety ambassadors standing joint roll calls with PPD, developing unified strategies for enhancing safety.**
- **RSAN/Alert Philadelphia – emergency text messaging communication system.**
- **Philadelphia Crime Prevention Council – 270 federal, state & local law enforcement meeting with corporate & private security bi-monthly.**
- **Building Owner's & Managers Association's (BOMA) – Safety & Security Committee – *Bill Kelhower is Co-Chairperson.***
- ***ATAC, Joint Terrorism Task Force, Intelligence Centers, Critical Infrastructure.***
- **Role of private sector in drills, table top exercises, sharing information & tech expertise.**



# Target Rich Environment

All the things that make Philadelphia a great city, make us a viable target :



Liberty Bell and Independence Hall- national treasures



# Target Rich Environment

## Critical Infrastructure



Utilities



Interstate 95

and

**ACTIVE SHOOTER**

**ASSASSINATIONS**

# **TERRORIST OPERATIONS**

**MASS  
KILLINGS**

**BOMBINGS**

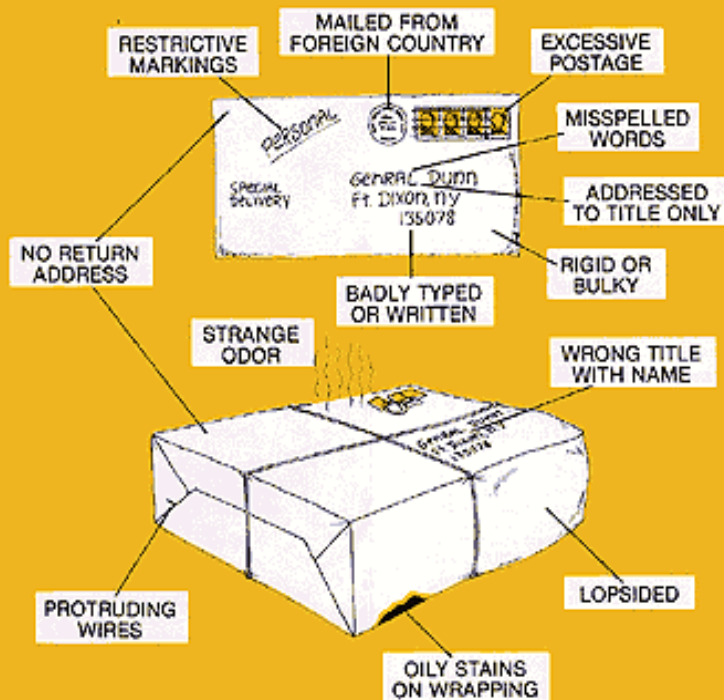
**ARSON  
ATTACKS**

**HIJACKING**

**STAND-OFF  
ATTACKS**

# SUSPICIOUS MAILING (Suspected Explosives)

## LETTER AND PACKAGE BOMB INDICATORS



Protruding Wires

Oily Stains

Lopsided

Strange Odor

No Return Address

Misspelled Words

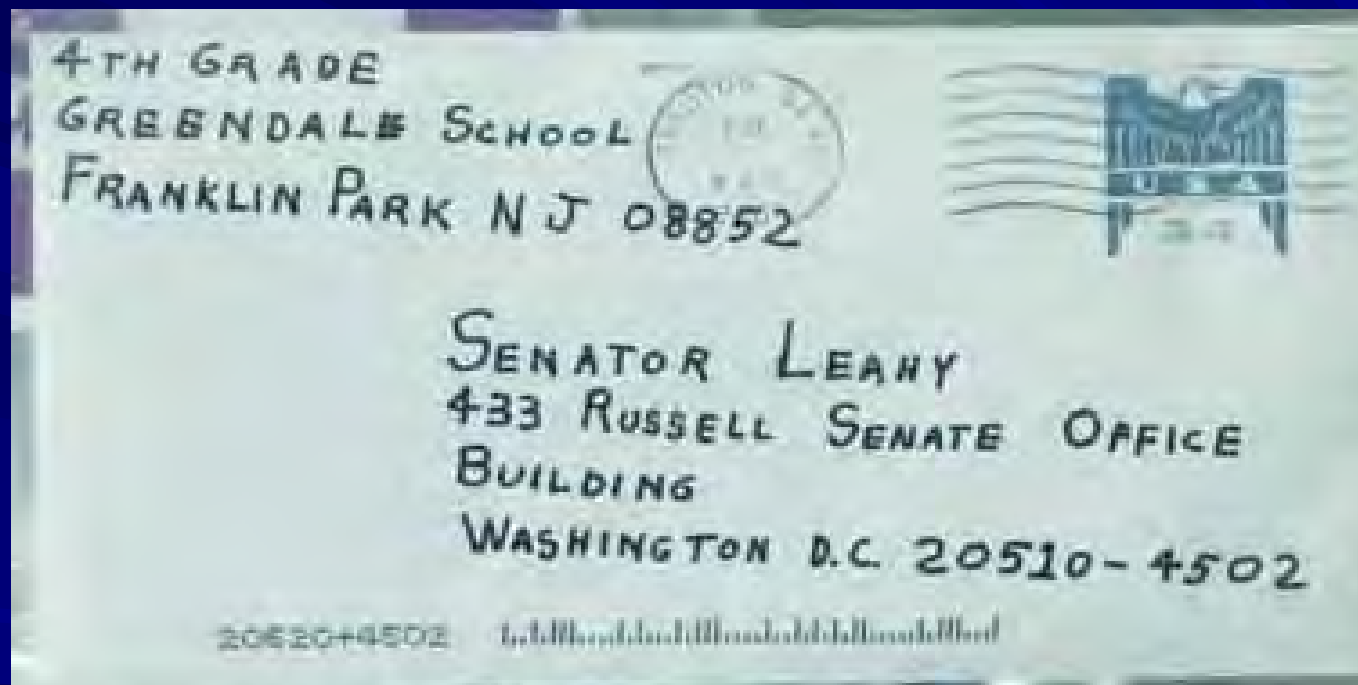
Excessive Postage

Restrictive Markings

# SUSPICIOUS MAILING (Non Explosive)



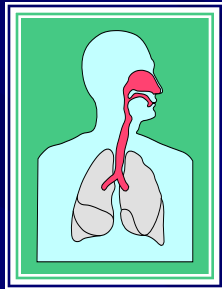
# ANTHRAX LETTER





# ROUTES OF EXPOSURES

Inhalation



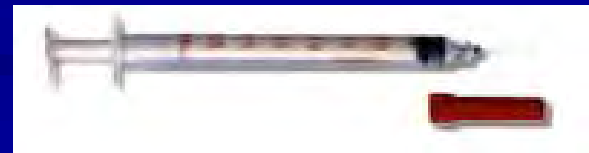
Ingestion



Absorption



Injection



# BIO vs. CHEM TERRORISM

- Not immediately obvious.
- May take days or weeks to notice results.
- Multiple victims with similar symptoms over time
- Eg. Anthrax
- Immediate results
- Multiple victims with similar symptoms almost immediately upon exposure
- Personnel must consider evaluating safety of scene (PPE)
- Eg. Chlorine, Cyanide

# SHELTER IN PLACE

- Atmosphere outside is more dangerous than inside
- Remain at street level or above( Some agents heavier than air)
- Area should be large enough to support people
- Few doors / windows
- Comfort considerations
- Plastic sheeting & duct tape
- Time?
- HVAC Systems
- Communications –Cell Phones, Radios ,Flashlights, Medications, people with special needs, signage.
- Prior Drills and exercises necessary for success.
- Tabletop exercises recommended

# Weapons of Mass Destruction Threat Spectrum



Explosives

Industrial  
Chemicals

**HIGH**

Biological  
Agents



Radio-  
Isotopes

Chemical  
Weapons

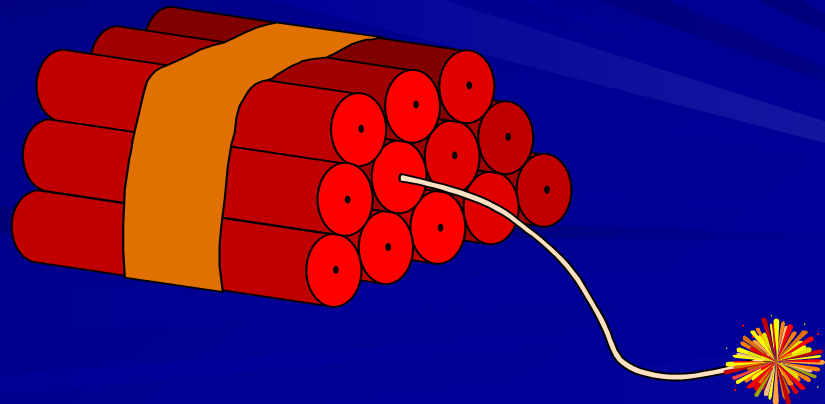


Nuclear  
Weapon

**LOW**

# EXPLOSIVES

- 70% of all terrorist incidents involve explosives
- They can be used to disperse chemical, incendiary, or radiological materials





# SUICIDE BOMBERS



# Suicide Bomber and Suspicious Device





# IMPROVISED DEVICES



# SATCHEL DEVICES

## CENTENNIAL PARK DEVICE



**Exterior view**

**Letter bombs**

**Interior view**

**IED (Improvised Explosive Device) contained black powder with light bulb filament initiator**

**Once insulation was removed between two contact points – IED functioned.**





**IED with friction pull initiation system**

**Once wire/string is pulled – IED functions**



**Exterior view**

**Suspect briefcase**



**Interior view**

**Cell phone initiated IED  
Pipe bombs & bolts utilized as shrapnel**



## Unabomber Device





# Incendiary Devices

## Components

- Ignition Source
- Combustible Filler
- Housing or Container

## Common Materials Used

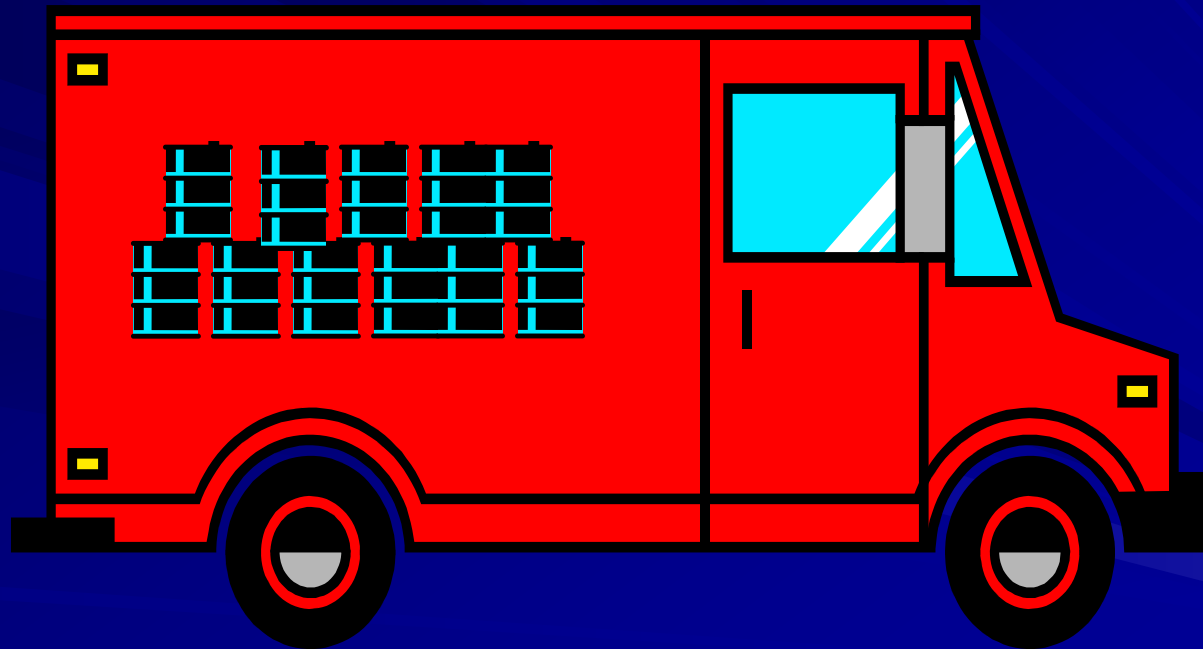
- Roadway Flares
- Gasoline/Motor Oil
- Light Bulbs
- Matches/Fireworks
- Electrical Components
- Propane Cylinders
- Bottles, Cans, Plastic Pipes







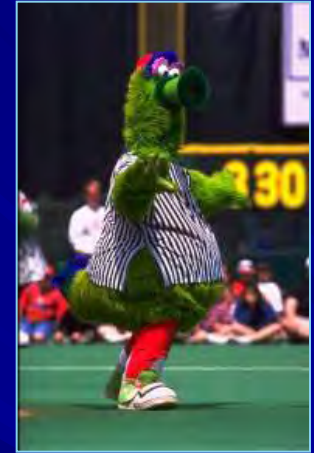
# VEHICLE BOMBS





# *Together Making The Region Safer!*

*Thank you.*

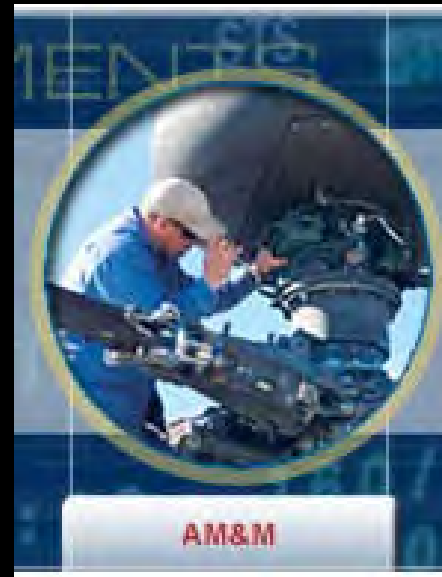


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communications



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- (C<sup>3</sup>ISR), Command, Control and Communications, Intelligence, Surveillance and Reconnaissance
- Government Services
- Aircraft Modernization and Maintenance (AM&M)
- The broadest base of Electronic Systems in the industry
- L-3 is also a major provider of homeland defense products and services for a variety of emerging markets.